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ABSTRACT

This report presents findings based on interviews with three nationally representative samples of currently married women between the ages of 15 and 44 years, as documented in 1965 National Fertility Study and the 1973 and 1976 National Surveys of Family Growth. Statistics from these surveys are presented on the contraceptive practice of respondents according to various socioeconomic characteristics. Findings are presented in two sections: use of contraception (contraceptive status) and couples using contraception (contraceptors) according to the method used. Findings are discussed which show that changes in contraceptive status, with use increasing from 63% in 1965 to 68% in 1976, were small compared with the changes in methods used among contraceptors. The background and methodology of the three surveys and trends and differences in the use of contraception are presented. The main body of the text describes trends in use of the pill, intrauterine device, sterilization, and other methods, according to age, race, number of years since first marriage, parity (number of children ever born) and intent to have more children, religion, and education. Within each section, trends and differentials are described. Appendix I contains technical details about the surveys; appendix II provides definitions of terms; and appendix III is a reprint of selected questions on contraceptive use from the 1976 National Survey of Family Growth. (NB)

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# Trends in Contraceptive Practice: United States, 1965-76

Data From the National Survey of Family Growth, Series 23, No. 10

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# Trends in Contraceptive Practice: United States, 1965-76

Statistics based on data collected in 1965, 1973, and 1976 are presented on the use of contraception by currently married women 15-44 years of age. Data are shown for women who used contraception by the methods of contraception used according to race, age, education, religion, and other socioeconomic characteristics.

**Data From the National Survey of Family Growth, Series 23, No. 10**

DHHS Publication No. (PHS) 82-1986

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February 1982

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**Symbols**

| | |
|---|---|
| . . . | Data not available |
| . . . | Category not applicable |
| - | Quantity zero |
| 0.0 | Quantity more than zero but less than 0.05 |
| Z | Quantity more than zero but less than 500 where numbers are rounded to thousands |
| * | Figure does not meet standards of reliability or precision |
| # | Figure suppressed to comply with confidentiality requirements |

# Trends in Contraceptive Practice

by William D. Mosher, Ph.D., Division of Vital Statistics, National Center for Health Statistics, and Charles F. Westoff, Ph.D., Office of Population Research, Princeton University

## Introduction

The National Survey of Family Growth, a periodic survey conducted by the National Center for Health Statistics, provides information on fertility, family planning, and aspects of maternal and child health that are closely related to childbearing. The National Survey of Family Growth is based on personal interviews with a multistage area probability sample of women 15-44 years of age in the household population of the conterminous United States. Approximately 9,800 women were interviewed in 1973 and approximately 8,600 in 1976. The 1965 National Fertility Study, a predecessor of the National Survey of Family Growth, was conducted by the office of Population Research of Princeton University and was similar in design and coverage.

This report presents statistics from these surveys on the contraceptive practice of currently married women 15-44 years of age in the United States in 1965, 1973, and 1976 according to various socioeconomic characteristics. The changes in contraceptive practices described in this report were so large and so important in explaining trends in the birth rate that they have been labeled elsewhere as a "contraceptive revolution" and as the "modernization" of contraceptive practice.[1-3]

# Summary of principal findings

This report is based on interviews with three nationally representative samples of currently married women 15-44 years of age: the 1965 National Fertility Study and the 1973 and 1976 National Surveys of Family Growth. Findings are presented in two sections: (1) use of contraception (contraceptive status), and (2) couples using contraception (contraceptors) according to the method used.

### Contraceptive status

Changes in contraceptive status during 1965-76 were small compared with the changes in methods used among contraceptors. The percent of couples using contraception at the date of interview increased from 63 percent in 1965 to 68 percent in 1976. Increases occurred for most groups of women shown in this report, although the changes in some groups were not statistically significant.

In all three survey years, black wives were less likely than white wives to have been using contraception (figure 1). In 1965, 56 percent of black wives and 64 percent of white wives were using contraception. In 1976, these figures were 59 and 69 percent.

In 1965, white Catholic couples were less likely to be using contraception than white Protestant couples (57 percent compared with 67 percent, figure 2). By 1976, however, this difference virtually had disappeared and was not statistically significant (68 percent compared with 69 percent).

### Contraceptors

During 1965-73 an increasing proportion of couples using contraception adopted methods that did not exist or rarely were used before 1960: the oral contraceptive pill, the intrauterine device, and male or female contraceptive sterilization.

From 1973 to 1976, however, this trend did not continue. The percent of contraceptors using the pill decreased slightly, and the percent using the IUD remained about the same. Contraceptive sterilization increased substantially among white Protestant couples, while use of methods other than the pill, IUD, and sterilization increased among black couples.

In 1965, the pill and condom each were used by approximately one in four couples using contraception. The pill was the leading method among wives 15-29 years of age in 1965 (41 percent); while the condom was the leading method among contraceptors 30-44 years of age in 1965 (24 percent). By 1973 and 1976, however, the pill was used by more than half of contraceptors 15-29 years of age, and sterilization became the leading method among contraceptors 30-44 years of age. The proportion of contraceptors 30-44 years of age using the condom declined to 12 percent by 1976.

The increase in the percent of contraceptors using the pill from 1965 to 1973 and the decrease from 1973 to 1976 were especially marked among younger black wives (15-29 years of age; figure 3). The percent of the younger black contraceptors using the pill doubled, from 31 percent in 1965 to 64 percent in 1973, which some observers have suggested may be attributed to the impact of organized family planning programs. The data suggest, however, that the percent of younger black contraceptors using the pill decreased to 56 percent in 1976.

By 1973, the pill dominated contraceptive practice among married women 15-29 years of age (especially among married teenagers), women married fewer than 5 years, and women who intended to have more births.

Use of the pill increased from 1965 to 1973 but decreased from 1973 to 1976. In contrast, contraceptive sterilization continued to increase rapidly through 1976, making it the leading method of contraception among couples 30-44 years of age, couples married 15 years or more, and couples who did not intend to have more children.

Among white contraceptors, sterilization was about evenly divided between male and female operations. But among black contraceptors, male sterilization was relatively rare. In all three survey years, white

contraceptors were much more likely than black contraceptors to use male sterilization. By 1976, 21 percent of white contraceptors and 5 percent of black contraceptors 30-44 years of age were using male sterilization (figure 4). The figures were similar by intent to have more children for couples 15-44 years of age—22 percent of white contraceptors and only 5 percent of black contraceptors who intended no more births were using male sterilization in 1976. This difference in male sterilization was the primary reason for race differences in methods used in 1976, because no significant differences were found by race in 1976 among couples who did intend to have more children.

Religion continued to be an important characteristic differentiating the contraceptive practice of white couples; although Catholic and Protestant differences in use of rhythm and the pill decreased, the difference in sterilization increased. In 1965, rhythm was the leading method among Catholic contraceptors, but from 1965 to 1973, use of rhythm declined sharply, from approximately 1 in 3 to less than 1 in 10 contraceptors (figure 5). By 1976, the leading method among Catholic couples was the pill, and differences between Protestant and Catholic couples in the percent using the pill had disappeared (figure 6).

On the other hand, in 1965 and 1973, Catholic contraceptors were less likely to use sterilization than Protestant couples and, between 1973 and 1976, this difference increased to 13 percentage points (20 percent of Catholic contraceptors, compared with 33 percent of Protestant contraceptors). The increase in sterilization among white couples from 1973 through 1976 appears to have occurred primarily among Protestant couples.

Use of female sterilization increased markedly from 1965 to 1976 (figure 7). This increase was largest among contraceptors with less than a high school education (12 percent to 25 percent) and smallest among contraceptors with more than a high school education (5 to 9 percent).

The following sections describe the background and methodology of the three surveys and trends and differences in the use of contraception (contraceptive status). The main body of the text describes trends in use of the pill, IUD, sterilization, and other methods, according to age, race, number of years since first marriage, parity (number of children ever born) and intent to have more children, religion, and education. Within each section, trends and differentials are described. Appendix I contains technical details about the surveys; appendix II provides definitions of terms; and appendix III is a reprint of selected questions on contraceptive use from the 1976 National Survey of Family Growth.

# Sources of data and methodology

The National Survey of Family Growth (NSFG) is based on personal interviews with a multistage area probability sample of women 15-44 years of age in the household population of the conterminous United States. Women were eligible for inclusion in the sample if they were currently married, previously married, or never married but had offspring living in the household. Cycle I of the NSFG was based on interviews with 9,797 women 15-44 years of age, of whom 7,566 were currently married. The interviews for Cycle I were conducted between July 1973 and February 1974. Cycle II of the NSFG was based on interviews with 8,611 women 15-44 years of age, of whom 6,482 were currently married. The interviews were conducted from January to September 1976.

The 1965 National Fertility Study (NFS)[4] was designed to continue a series of surveys of American women[5,6] that collected a pregnancy history from each woman, her past and expected births, past and current contraceptive practice, and fecundity impairments, by various social and economic characteristics, including some not available from other sources. The 1965 NFS was conducted by Norman B. Ryder and Charles F. Westoff of Princeton University under contract with the Center for Population Research of the National Institute for Child Health and Human Development.

The 1965 NFS was based on personal interviews with a nationally representative area probability sample of 5,617 currently married women 15-55 years of age living in the conterminous United States. Fieldwork for the NFS was conducted in late 1965 and centered on mid-November; 4,810 of the women interviewed were currently married and 15-44 years of age.

This report is based on the samples of currently married women 15-44 years of age in the three surveys. All three surveys sampled black women at a higher rate than other women to provide separate, reliable statistics for this group.

Percents in this report are estimates for the national population that the surveys were designed to represent. In the NSFG, the "weight" for each respondent is the product of three factors:[7,8] (1) the reciprocal of the probability of selection; (2) adjustment for nonresponse to the screener and interview; and (3) poststratification to independent population estimates by age and race, based on the Current Population Survey conducted by the U.S. Bureau of the Census. In the 1965 NFS, black women 15-44 years of age were given a weight of 0.363, and other women 15-44 were given a weight of 1.0. These weights compensate for the sampling of black wives at a higher rate than other wives and match the population of currently married women 15-44 from the Current Population Survey. This procedure corresponds approximately to steps (1) and (3) above but has some differences. Because no adjustment was made for nonresponse in the NFS, estimates of aggregate numbers (for example, the number of women using the pill) from the NFS and NSFG are not strictly comparable. Because the NFS was not designed to estimate weighted numbers in the same way as the NSFG, aggregate numbers from the 1965 NFS are not shown in this report. The weighted percents in the NFS and the NSFG, however, are sufficiently comparable to study the principal trends from 1965 to 1976.

Because the estimates in this report are based on samples of the population rather than on the entire population in each of the years, they are subject to sampling variability. Furthermore, because each is a complex sample rather than a simple random sample, conventional formulas for estimating the standard errors of the statistics are not applicable. Tables and formulas showing estimates of standard errors for the 1965 NFS and the 1976 NSFG are included in appendix I of this report. Tables of standard errors for the 1973 NSFG were published in several reports in Series 23.[9-12] The base numbers needed to determine the standard errors from these tables and formulas are shown in this report. The base numbers appear in

table 1 for 1976, table 2 for 1973, and table 3 for 1965.

Further discussion of the survey designs and definitions of terms are in the appendixes of this report, in the detailed reports on the design of the NSFG,[7,8] and in the full report of the 1965 NFS.[4]

In this report, the term "similar" means that an observed difference between two estimates compared is not statistically significant; terms such as "greater," "less," "larger," and "smaller" indicate that the observed differences are statistically significant at the 5-percent level, using a two-tailed *t*-test with 40 degrees of freedom. Statements of differences that are qualified by using the phrase "the data suggest" indicate that the difference is significant at the 10-percent level but not at the 5-percent level.

Characteristics reported such as age, race, years since first marriage, parity, intent to have a birth, religion, and education refer to women interviewed. The term "couples" also refers only to wives; for example, the expression "black couples" refers to couples with black wives, and "couples 30-44 years of age" refers to couples with wives 30-44 years of age, regardless of the race or age of husbands in those couples.

The methods of contraception generally used before 1960–the diaphragm, condom, foam, rhythm, withdrawal, douche, and other–are referred to in this report as "traditional methods." Methods of contraception not available or rarely used before 1960–the pill, IUD, and sterilization–are referred to as "modern methods." Research based on the NFS and the NSFG has shown that the modern methods have lower probabilities of failure in use than the traditional methods.[13-16]

The three surveys were designed to represent approximately the same population, and the interview schedules covered the same basic topics. There were some differences in the sampling procedures and interview schedules, however, that may have affected comparisons in some cases; these instances are discussed in this report. (The complete questionnaires for currently married women in Cycles I and II of the NSFG were published in another NCHS report;[17] the complete questionnaire used in the 1965 NFS was published in the full report of that study.[4])

To maximize comparability, the procedures used in classifying the current contraceptive status of women in the NSFG were used on the data from the NFS as well. These procedures are described in appendix II.

# Comparisons with other data

Because the NFS data used for this report were tabulated according to the procedures used in the NSFG, the data for 1965 published in this report may differ slightly from data published in previous papers based on the NFS.[2-4] In no case are the differences substantively important.

The results reported for 1973 are based on final, revised data and are comparable to the data for 1973 published in other Cycle I reports.[10,18,19] Both differ slightly from the preliminary data for 1973 in an earlier article.[3] None of these differences are substantively important.

The data in this report for Cycle II of the NSFG (1976) are final, revised data. They supersede the preliminary data for Cycle II published in several preliminary reports;[20-22] the differences generally are very small.

Data in this report may differ substantially from the data based on the 1975 National Fertility Study,[23,24] which was a longitudinal study of white women married fewer than 25 years in intact first marriages begun before the women were 25 years of age. The 1975 NFS data are not comparable to the data in this report because (1) the coverage of the samples were different in many respects, (2) the data in NFS reports[23,24] were standardized, and (3) the NFS data refers to 1975 rather than 1976.

# Use or nonuse of contraception (contraceptive status)

Compared with the changes in the distributions of methods used by contraceptors discussed in later sections, the changes from 1965 to 1976 in contraceptive status generally were small (table 4). Many changes from 1965 to 1976 were not statistically significant and, in some cases, when they were significant, they may be attributed to the differences in the questionnaires and procedures used in the three surveys. Some of these differences are discussed in detail in appendix II of this report, especially in the definitions of surgical and nonsurgical sterility.

Contraceptive status (tables 4-6) is a characteristic of couples that was measured at the approximate date of the interview and contains four principal categories: (1) using contraception (contraceptors); (2) not using contraception because the woman was pregnant, post partum, or trying to become pregnant; (3) not using contraception because of sterility (noncontraceptively sterile); and (4) not using contraception for other reasons (other nonusers). The latter category includes reasons for nonuse of contraception such as religious or personal objections to contraception, low risk of pregnancy because of difficulty conceiving, and indifference to the risk of pregnancy. Among younger women (15-29 years of age), most wives not using contraception were pregnant, post partum, or seeking pregnancy; among women 30-44 years of age, most noncontraceptors were noncontraceptively sterile or other nonusers.

The percent of couples using a method of contraception at the date of the interview (68 percent) was smaller than the percent who regularly used a method; both were smaller than the percent who ever used a method. The 13 percent of women who were pregnant at the date of interview, were seeking pregnancy, or had just completed a pregnancy (post partum) included many who had used contraception and many who would return to the practice. These women, with those who were noncontraceptively sterile (11 percent in 1976), were not at risk of an unplanned pregnancy. Therefore, the percent of women at risk (contraceptors plus other nonusers) who were using contraception (contraceptors) was 67.7 divided by (67.7 + 7.6) or 89.9 percent in 1976.

In this report, the contraceptive method used at the approximate date of the interview is used as an indicator of the couple's usual method of contraception, in part because the current method may be defined more clearly and, therefore, is understood easily by the respondent and interviewer. Because most couples at risk of an unplanned pregnancy usually use contraception, the pattern of method preference is shown using contraceptors as the base.

The percent of couples in a given group using a particular method, such as the pill, is affected by two factors: (1) the percent of that group using a contraceptive method, and (2) the popularity of that method among couples using contraception. To describe differences among social, racial, and age groups in the proportion using any method, tables 4-6 show categories of contraceptive status. To describe differences in method popularity, tables 7-14 show percents of couples using particular methods, the base of which is limited to couples using contraception.

Although it is difficult to predict whether the percent of currently married women 15-44 years of age who were using contraception (68 percent in 1976) will increase or decrease in future years, it is possible to suggest the probable limits on those changes. These depend on factors such as the proportions of wives pregnant and seeking pregnancy and the prevalence of noncontraceptive sterility and subfecundity. Comparisons with data from other Western industrial nations suggest that the percent of wives 15-44 years of age using contraception at the date of interview is unlikely to exceed approximately 80 percent.[25]

### Contraceptors

Table 4 contains data on the contraceptive status of currently married women of all races in 1965,

1973, and 1976. The percent of couples 15-44 years of age using contraception increased from 63 percent in 1965 to 70 percent in 1973, and decreased (nonsignificantly) to 68 percent in 1976. The decrease between 1973 and 1976 may be attributed at least in part to changes in the survey procedures with regard to surgical sterilization, as discussed in appendix II; it probably does not represent a real decrease in the percent of couples using contraception.

Overall, the percent of women using contraception increased from 63 percent in 1965 to 68 percent in 1976. Although many differences were too small to be statistically significant, the percent using contraception increased during 1965-76 in every category but one shown in table 4, and the lone exception was not statistically significant. Increases tended to be larger among younger women than among older women (from 55 to 69 percent among married teenagers, but only from 63 to 67 percent among women 30-44 years of age). Similarly, there was a larger increase among women married fewer than 5 years than those married longer, and a larger increase among women who intended to have more children than among those who did not intend to have more children.

Table A shows the percent distribution of all currently married women 15-44 years of age by contraceptive status and method. Four principal points are evident. First, despite the increase in use of the pill and the IUD, the percent of wives 15-44 years of age using nonsurgical methods of contraception at the date of interview *declined* from 1965 to 1976 from 55 to 49 percent. This decline occurred, however, only among wives 30-44 years of age; the percent of wives 30-44 years of age using nonsurgical methods declined from 53 percent in 1965 to 40 percent in 1976. There was no significant change among wives 15-29 years of age. Second, the percent using contraceptive sterilization rose from 8 percent in 1965 to almost 19 percent in 1976. This change also was confined primarily to couples 30-44 years of age, among whom the percent contraceptively sterile rose from 10 to 27 percent during 1965-76. Third, the percent using the pill increased from 15 percent in 1965 to 25 percent in 1973 but then declined slightly to 23 percent in 1976. This trend occurred in both age groups, but the increase in 1973 was more pronounced among wives 15-29 years of age. Fourth, the percent using traditional methods declined dramatically from 1965 to 1976, from 40 to 20 percent. This decline differed little by age. Tables 7-14 in this report show the rise of contraceptive sterilization, the increase in use of the pill, and the decline in traditional methods, but they do not explicitly reveal that the percent of all couples using any nonsurgical method declined during this period of time. This topic is explored in more detail by Pratt et al.[26]

In tables 7-14, contraceptors are classified by the specific contraceptive methods they were using. The base of the percents in tables 7-14 is *not* all currently married couples; the base is the number of couples using contraception.

### Pregnant, post partum, seeking pregnancy

From 1965 to 1976, overall birth rates declined in the United States.[27] As might be expected when birth rates decline, the data suggest that the percent

Table A. Percent distribution of currently married women 15-44 years of age by contraceptive status and method, according to age: United States, 1965, 1973, and 1976

| Contraceptive status and method | Age | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 15-44 years | | | 15-29 years | | | 30-44 years | | |
| | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 |
| | Percent distribution | | | | | | | | |
| All women | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Contraceptors | | | | | | | | | |
| Total | 67.7 | 69.6 | 63.2 | 68.9 | 70.2 | 63.1 | 66.7 | 69.1 | 63.3 |
| Sterilization | 18.6 | 16.4 | 7.8 | 8.1 | 7.9 | *3.9 | 27.2 | 23.4 | 10.4 |
| Nonsurgical methods | 49.2 | 53.2 | 55.4 | 60.8 | 62.3 | 59.2 | 39.5 | 45.7 | 52.9 |
| Oral contraceptive | 22.5 | 25.1 | 15.1 | 35.1 | 37.6 | 26.1 | 12.0 | 14.8 | 8.0 |
| Intrauterine device | 6.3 | 6.7 | *0.8 | 7.2 | 8.4 | *1.1 | 5.6 | 5.2 | *0.5 |
| Traditional methods | 20.4 | 21.4 | 39.5 | 18.4 | 16.2 | 32.0 | 21.9 | 25.7 | 44.3 |
| Noncontraceptors | | | | | | | | | |
| Total | 32.3 | 30.4 | 36.7 | 31.1 | 29.8 | 36.9 | 33.3 | 30.9 | 36.7 |
| Pregnant, post partum, or seeking pregnancy | 13.3 | 14.3 | 15.4 | 22.2 | 23.0 | 27.2 | 5.8 | 7.0 | 7.8 |
| Noncontraceptively sterile | 11.4 | 7.5 | 11.6 | 3.3 | 1.3 | 3.3 | 18.2 | 12.6 | 17.0 |
| Other nonusers | 7.6 | 8.7 | 9.7 | 5.6 | 5.5 | 6.4 | 9.3 | 11.3 | 11.9 |

NOTE: Statistics are based on samples of the household population of the conterminous United States. See appendixes I and II for descriptions of the sample design of each survey, estimates of sampling variability, and definitions of terms.

of married women who were pregnant, post partum, or seeking pregnancy at the date of interview declined, from 15 to 13 percent. The decline was greater among women 15-29 years of age than among women 30-44 years of age and greater among women married fewer than 5 years than among those married longer.

### Noncontraceptively sterile

The decrease in the percent of couples noncontraceptively sterile, from 12 percent in 1965 to 8 percent in 1973, was probably the result of trends in contraceptive use. One reason for this decrease was the increase in the proportion of couples using contraception during 1965-73. In 1973, couples probably were less likely to discover noncontraceptive sterility than in 1965 because of the trend by 1973 of increased and earlier use of contraception. This point also holds for contraceptive sterilization, which more than doubled from 1965 to 1973 among couples 30-44—couples sterilized for contraceptive reasons, for example, at age 32, cannot discover noncontraceptive sterility that would have appeared several years later. The apparent increase in the percent of couples noncontraceptively sterile from 8 percent in 1973 to 11 percent in 1976 probably reflects (1) the change in the wording of the question on the contraceptive intent of sterilization between 1973 and 1976 (see appendix II), and (2) the addition of some followup questions on the 1976 survey concerning difficulties in conceiving. In short, it is not possible to conclude from these data whether there was a substantial upward trend in noncontraceptive sterility during this period. The data on noncontraceptive sterility are useful, however, to examine differences between groups (differentials) in particular years. These differentials are discussed in the section titled "Differentials in contraceptive status."

### Other nonusers

This category comprises women who were not using contraception and were not sterile, pregnant, post partum, or seeking pregnancy and, therefore, were at risk of an unplanned pregnancy at the date of interview. Approximately 10 percent of women were classified as other nonusers in 1965, compared with approximately 8 percent in 1976. Most declines from 1965 to 1976 in the percent of women who were other nonusers were not statistically significant.

### Differentials in contraceptive status

In all 3 survey years, the percents of women using contraception were not significantly different by age (table 4). In 1973 and 1976, for example, younger wives (15-29 years of age) were more likely to be pregnant, post partum, or seeking pregnancy than those 30-44 years of age and less likely to be other nonusers. In both years, the percent pregnant, post partum, or seeking pregnancy declined, and noncontraceptive sterility increased as the number of years since first marriage increased. In 1976, women who intended to have more children were much more likely to be pregnant, post partum, or seeking pregnancy, less likely to be sterile, and *less* likely to be other nonusers than women who did not intend to have more children. Women with a high school education were more likely in 1976 to use contraception and less likely to be noncontraceptively sterile or other nonusers than those with less than a high school education.

Tables 5 and 6 contain data on the contraceptive status of white women and black women. In all 3 survey years, black wives were much less likely than white wives to be using contraception and more likely to be other nonusers. In 1965, 56 percent of black and 64 percent of white wives were contraceptors, an 8 percentage point difference (figure 1). In 1965, black wives were less likely to use contraception than white wives among those 30-44 years of age, those married 15 years or more, and those who did not intend to have more children. The differences in 1965

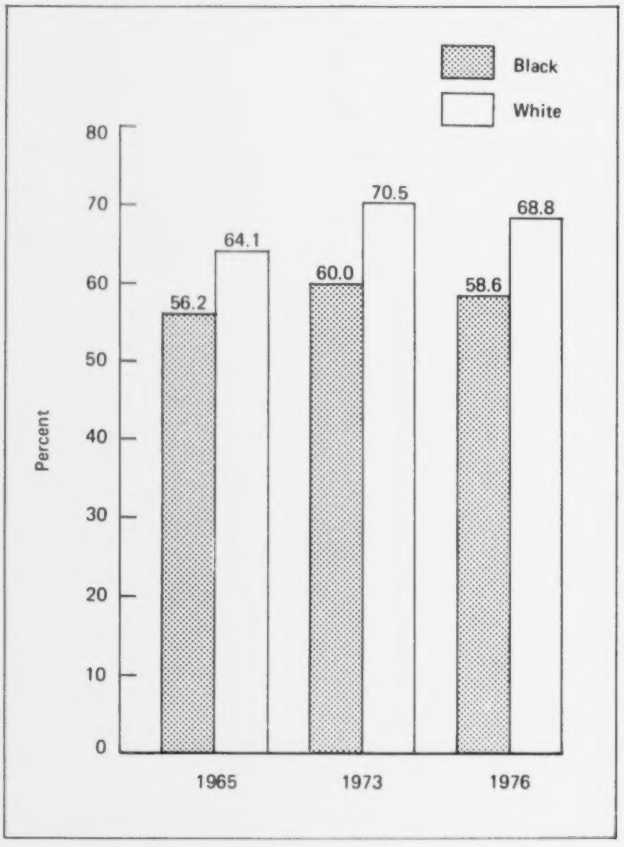


Figure 1. Percent of currently married women 15-44 years of age using contraception, by race: United States, 1965, 1973, and 1976

were much smaller and not statistically significant among wives 15-29, those married fewer than 5 years, and those intending to have more children.

In 1973, black women were more likely than white women to be other nonusers in both age groups, in each category of years since the wife's first marriage, and at each educational level. In 1976, the differences usually were smaller and many were not significant. Also in 1976, no significant difference by race was found in the percent of women who were other nonusers among women who intended to have more children.

In 1976, 16 percent of black wives were pregnant, post partum, or seeking pregnancy, compared with 13 percent of white wives. In all 3 survey years, however, there were few other statistically significant differences between white and black women in the percent of wives who were pregnant, post partum, or seeking pregnancy or noncontraceptively sterile.

White wives are shown by religion in table 5. White Catholic wives were less likely than white Protestant wives to be using contraception in 1965 (57 percent compared with 67 percent). (See also figure 2.) From 1965 to 1976, however, the percent of Catholic women using contraception increased 11 percentage points and, by 1976, the religious difference was not statistically significant--69 percent of Protestant and 68 percent of Catholic wives were using contraception in 1976. The increase in the percent of Catholic wives using contraception coincided with an 8 percent decrease in the percent who were pregnant, post partum, or seeking pregnancy, from 21 percent in 1965 to 13 percent in 1976.

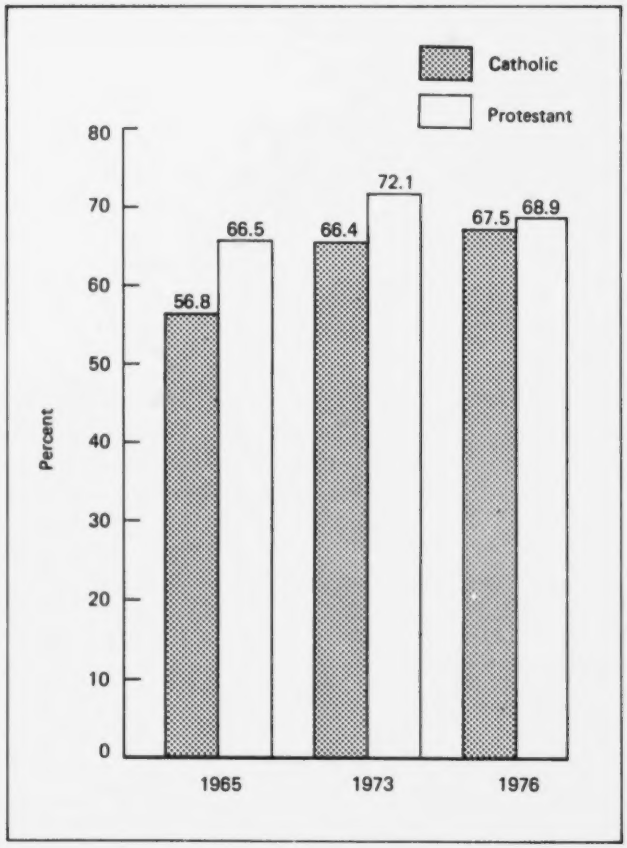


Figure 2. Percent of currently married white women 15-44 years of age using contraception, by religion: United States, 1965, 1973, and 1976

# Trends in use of contraceptive methods

The increase in the percent of couples using the pill, the IUD, and sterilization from 1965 to 1973 has been characterized as a "contraceptive revolution" and as the "modernization" of contraceptive practice.[1-3] But the changes during 1973-76 differed from earlier changes and, among some groups, represent less protection from unplanned pregnancy than in 1973.[13-15] The demographic effects of these trends depend primarily upon whether they continued after 1976.

Table 7 shows the percent distributions of currently married couples using contraception in 1965, 1973, and 1976. This section presents a profile of use in 1965 and 1976 and discusses trends in individual methods, focusing on differences and trends by age of the wife.

## Age

In 1965, the leading methods of contraception were the pill (24 percent of contraceptors) and condom, with 22 percent (table 7). By 1976, the pill accounted for 33 percent of contraceptors, but sterilization was the next most common method with 27 percent.

Among younger couples (15-29 years of age), the pill was the leading method in 1965 (41 percent), followed by the condom (19 percent). By 1976, the pill was still the most popular, used by 51 percent of younger contraceptors; it was followed by sterilization, used by 12 percent.

Among wives 30-44 years of age in 1965, the condom was the leading method, used by 24 percent of contraceptors; sterilization was used by 16 percent. By 1976, however, sterilization was the leading method in this age group, accounting for 41 percent of contraceptors. The pill was used by 18 percent of contraceptors 30-44 years of age in 1976.

*Oral contraceptive pill.*—In 1965, only five years after its introduction in the United States, the pill was the leading method of contraception, accounting for 24 percent of contraceptive use (table 7). Use of the pill increased substantially by 1973, accounting for 36 percent of contraceptors. By 1976, however, use of the pill had decreased slightly but significantly, to 33 percent of contraceptors. A recent study found that pill discontinuation rates increased between 1967 and 1975, especially since 1972. The most common reasons given for pill discontinuation were related to "problems of use"; most of these were physical and medical.[28]

The percent of contraceptors using the pill differed sharply by age. In 1976, for example, 51 percent of contraceptors 15-29 years of age were using the pill, compared with 18 percent of contraceptors 30-44 years of age. In all 3 survey years, the pill was the leading method of contraception among younger wives (15-29 years of age) and, in 1973 and 1976, it was used by more than half of the wives 15-29.

*Sterilization.*—Unlike the trend in pill use, which peaked in 1973 and decreased by 1976, use of contraceptive sterilization increased sharply throughout 1965-76. Sterilization (male or female) increased from 12 percent of contraceptors in 1965 to 24 percent in 1973 and 27 percent in 1976.

These increases were evident particularly among couples 30-44 years of age—from 16 percent of contraceptors in 1965 to 41 percent in 1976. Sterilization was the leading method among couples 30-44 years of age in 1976.

*Intrauterine device.*—Like the pill, use of the IUD appears to have peaked around 1973. In that year, the IUD accounted for approximately 10 percent of contraceptors. There was no significant change from 1973 to 1976, overall or in either age group. Like the pill, the IUD has been alleged to pose health risks for some women,[29,30] and this may account for the absence of an increase in use of the IUD during 1973-76.

*Other methods.*—The percent of married contraceptors using traditional methods declined markedly from 1965 to 1973, from 63 to 31 percent. This dramatic decrease, observed in both age groups, did

not continue from 1973 to 1976. Among contraceptors 15-29 years of age, the percent using traditional methods increased from 23 to 27 percent. In contrast, the percent of contraceptors 30-44 years of age using traditional methods declined from 1973 to 1976, perhaps because of the rapid increase in contraceptive sterilization among this group.

The condom was the second leading method in 1965, with 22 percent of use. The percent of contraceptors using the condom decreased to 11 percent in 1976, and this trend was not sharply different by age.

### Race

Tables 8 and 9 contain data for white couples and black couples using contraception in 1965, 1973, and 1976. This section presents a profile of contraceptive use within each age group by race in 1965 and compares the trends and differences as of 1973 and 1976.

In 1965, the leading methods of contraception among white couples (table 8) were the pill, used by 24 percent of contraceptors, and the condom, used by 22 percent. Rhythm, the diaphragm, and sterilization also were used by at least 10 percent of white contraceptors.

In 1965, the pill was the leading method among black couples, accounting for 22 percent of contraceptors (table 9). The other methods used by at least 10 percent of black contraceptors were the condom (17 percent), douche (16 percent), and female sterilization (15 percent).

The pill dominated contraceptive practice of white wives 15-29 years of age in 1965, when 42 percent of the younger white contraceptors used it. The condom, used by 19 percent, was the only other method that was used by more than 10 percent of contraceptors in that age group.

Among younger black contraceptors (15-29 years of age) in 1965, the most popular methods were the pill (31 percent), condom (19 percent), and douche (14 percent).

Among white couples 30-44 years of age in 1965, contraceptive practices were much more diverse than among couples 15-29 years of age. The condom, used by 24 percent of contraceptors, was the leading method, but sterilization, rhythm, the pill, and diaphragm each were used by at least 10 percent of couples 30-44 years of age (table 8).

The leading methods used by black contraceptors 30-44 years of age in 1965 were female sterilization (23 percent), douche (19 percent), condom (16 percent), and the pill (12 percent).

In 1965, the percents of white couples and black couples using the pill, the IUD, or sterilization did not differ significantly. By 1973, however, black contraceptors were more likely than white contraceptors to use the pill (44 percent compared with 36 percent), the IUD (13 compared with 9 percent), and

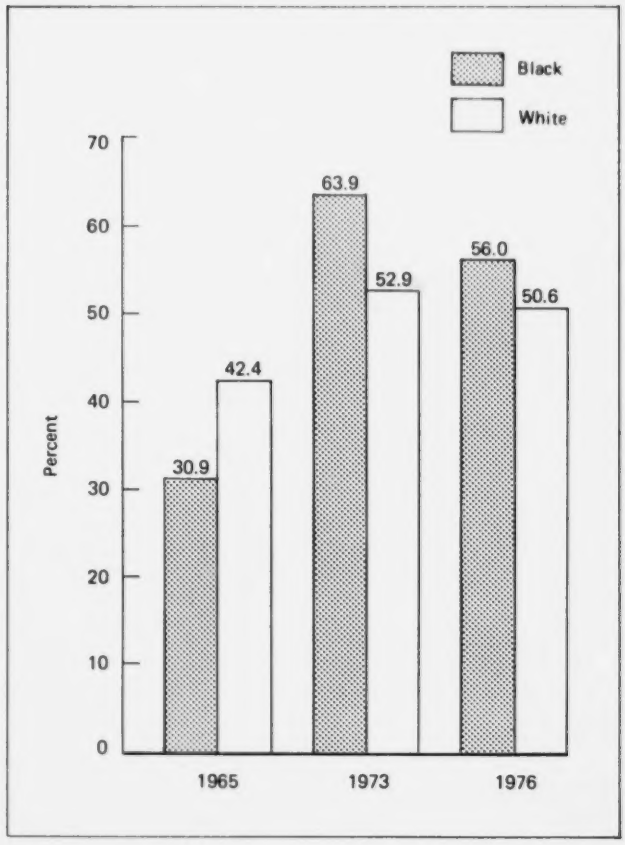


Figure 3. Percent of currently married contraceptors 15-29 years of age using the oral contraceptive pill, by race: United States, 1965, 1973, and 1976

modern methods as a group (81 percent compared with 68 percent).

Among younger wives (15-29 years of age) in 1965, 42 percent of white contraceptors were using the pill, but only 31 percent of black contraceptors were (figure 3). By 1973, however, this differential reversed. The percent of the younger black women using the pill doubled from 31 percent in 1965 to 64 percent in 1973. During the same period, the percent of younger white contraceptors using the pill increased from 42 to 53 percent.

Popularity of male sterilization and female sterilization procedures differed sharply for white couples and black couples. In all 3 survey years, black contraceptors were more likely than white contraceptors to use female sterilization and much less likely to use male sterilization (figure 4). Among white couples in all 3 survey years, the percents of white contraceptors using female sterilization and male sterilization were not significantly different (7 and 6 percent in 1965; 14 percent each in 1976). In marked contrast, however, male contraceptive sterilization was rare among black couples; in 1965, for example, 15 percent of black contraceptors were using female sterilization and only 1 percent were using male sterilization. In

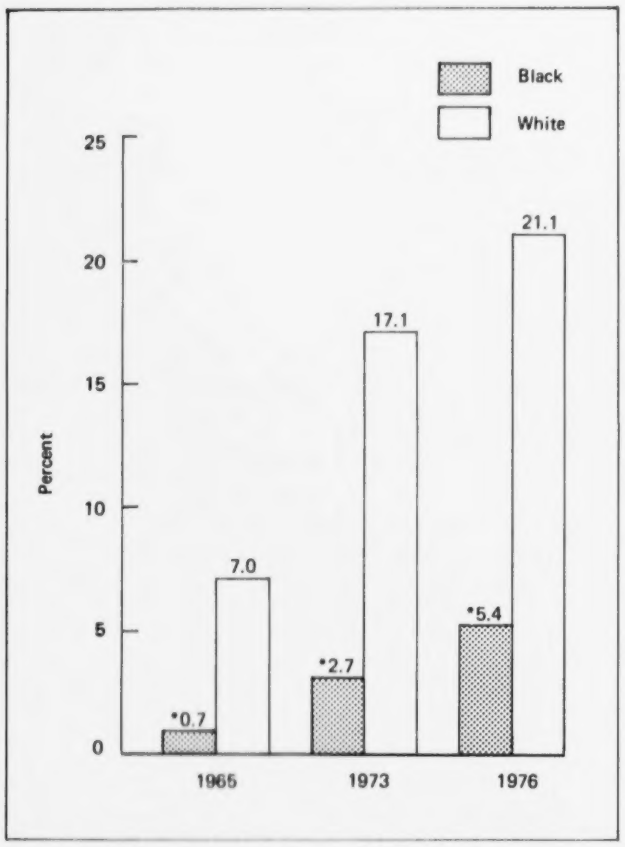


Figure 4. Percent of currently married contraceptors with wife 30-44 years of age using male sterilization, by race: United States, 1965, 1973, and 1976

1976, 19 percent of black contraceptors were using female sterilization; only 3 percent were using male sterilization—a ratio of more than 6 to 1.

In 1965 and 1973, these differences in sterilization by sex approximately counterbalanced each other, so that percents of white contraceptors and black contraceptors using sterilization (male and female) were not significantly different. In 1976, however, this was no longer true—28 percent of white contraceptors and 22 percent of black contraceptors were using contraceptive sterilization.

In 1965, 16 percent of black contraceptors were using douche as the only method of contraception, compared with only 4 percent of white contraceptors. In 1973, 3 percent of black contraceptors were using douche, compared with 1 percent of white contraceptors; in 1976, these figures were 5 percent and 1 percent.

From 1965 to 1973, the percent of black contraceptors 15-29 years of age using modern methods doubled, from 43 percent to 88 percent. Some researchers suggested that these rapid changes in contraceptive practice among black wives could be attributed to organized family planning programs and, if the trends continued, the fertility differences between white couples and black couples would narrow considerably.[31,32]

During 1973-76, however, these trends did not continue. Among black contraceptors, the percent using modern methods decreased substantially, from 81 percent to 70 percent. This decrease was statistically significant in both age groups but was larger among younger black women, from 88 percent in 1973 to 74 percent in 1976. The data suggest that the percent of younger black contraceptors using the pill decreased from 64 to 56 percent.

Among younger black contraceptors, the percent using traditional methods doubled from 1973 to 1976, from 13 percent to 26 percent. It has been suggested that this trend toward traditional methods accounted for a doubling of abortions to black women from 1973 to 1976[33] and speculated that if abortion were not available, unwanted births to black women would increase.[34]

### Married teenagers

Teenage wives (15 to 19 years of age) have been the subject of considerable public attention and research interest because of problems associated with teenage marriage and childbearing.[35,36,37] Statistics on the contraceptive practice of teenage wives are shown in table 10. Because of the small number of sample cases of married teenagers in each survey, small differences should be interpreted very cautiously.

In 1965, 52 percent of teenage contraceptors used oral contraceptives (table 10). By 1973, this proportion rose substantially to 77 percent, and the pill dominated contraceptive use among teenage wives. The apparent decrease in 1976 to 71 percent using the pill was not statistically significant; when combined with the marked increase in the percent of teenage wives using contraception (table 4), the percent of all teenage wives using the pill at the date of interview showed a nonsignificant *increase,* from 44 percent in 1973 to 49 percent in 1976.

Comparison of teenage contraceptors (table 10) with contraceptors 15-29 years of age (table 7) showed that married teenagers were much more likely to use the pill than were married contraceptors in their twenties in 1973 and 1976. This dominance of the pill among teenagers has caused concern among some observers about the possible health risks of prolonged use of oral contraceptives,[30] but it does suggest that most of these women were well-protected against unplanned pregnancy.[13-15]

### Years since first marriage

The number of years since the wife's first marriage (table 11) is referred to in this report as "years since first marriage" or as "duration." Ages at which

wives in any age group were married vary; therefore, the number of years since marriage at date of interview may also vary for wives within each age group. It is therefore useful to compare the contraceptive practices of couples with similar durations.

The data in table 11 show that recently married contraceptors relied on the pill throughout the study period (1965-76). Table 11 also reveals that couples married 15 years or more increasingly depended on sterilization.

In 1965, 1973, and 1976, the pill was the leading method of contraception among couples married fewer than 5 years. The percent of these women using the pill increased from 48 percent in 1965 to 63 percent in 1973, but the data suggest a decrease to 59 percent in 1976. Among black women married fewer than 5 years, both of these changes were more pronounced than among white women. In 1965, 30 percent of black contraceptors married fewer than 5 years were using the pill. By 1973, this figure more than doubled to 71 percent; by 1976, it had decreased to 60 percent. Comparisons with white women show that among contraceptors married fewer than 5 years, black women in 1965 were substantially *less* likely than white women to use the pill; in 1973, black contraceptors were *more* likely; in 1976, there was no significant difference (table 11).

In 1976, sterilization was the leading method of contraception among couples married 15 years or more and was used by 47 percent of contraceptors. In 1965, however, the condom—used by 23 percent of contraceptors married 15 years or more—was the leading method, and sterilization was used by 19 percent.

In 1965 and 1976, the percent of contraceptors using the pill decreased substantially as duration increased. In 1965, 48 percent of contraceptors married fewer than 5 years were using the pill, compared with only 11 percent of those married 15 years or more. In 1976, this range was from 59 percent of those married fewer than 5 years to 14 percent of those married 15 years or more.

In a pattern complementary to that of the pill, the percent of contraceptors using sterilization increased sharply as duration increased, in 1965 and 1976. In 1965, only 1 percent of contraceptors married fewer than 5 years were using sterilization, compared with 19 percent of contraceptors married 15 years or more. Because of the sharp increases in sterilization in this period, however, by 1976, these figures were 3 percent of contraceptors married fewer than 5 years and 47 percent of those married 15 years or more.

From 1965 to 1973, the percent of contraceptors using the pill and the percent using sterilization increased in each duration category. From 1973 to 1976, however, these patterns were not consistent.

The percent of white contraceptors using the pill did not change significantly between 1973 and 1976 in any of the first three duration categories (less than 15 years duration). However, the percent of white women married 15 years or more using the pill decreased from 19 percent in 1973 to 14 percent in 1976. This decrease was related to sharp increases in sterilization among white contraceptors married 10-14 years and 15 years or more.

### Parity and intent to have more children

Table 12 contains data on contraceptors by parity and intent to have more children. These data provide insight into the motivations for contraceptive choice, and reflect the obvious fact that contraceptors who intended to have more children could not use sterilization.

In 1965, contraceptive practice among couples who intended no more births was diverse—the condom, the pill, and sterilization were the leading methods, but no method accounted for more than one in four contraceptors.

By 1976, however, sterilization was the leading method among contraceptors who did not intend to have more children, accounting for 43 percent. The pill was the second leading method, used by 22 percent of contraceptors who did not intend to have more births.

The increase in the use of the pill from 1965 to 1973 was much more pronounced among women intending to have more births (table 12). By 1973, 61 percent of contraceptors who intended to have more births were using the pill; no other method was used by more than 13 percent of these women in 1973. In 1976, the percent of contraceptors using the pill had decreased to 56 percent, but the pill was still the leading method among these couples.

The differences between white contraceptors and black contraceptors (tables 8 and 9) are explained in part by the data by intent to have more children (table 12). Among contraceptors in 1976 who intended to have more children, no statistically significant differences were found between white contraceptors and black contraceptors in the percents using the pill, the IUD, or traditional methods. This similarity was present overall and in both parity groups. So in 1976, the differences between white contraceptors and black contraceptors were only among those who did *not* intend to have any more births. Black women who did not intend to have more children were more likely than white women to use female sterilization; the data also suggest that black women were more likely to use the pill. However, these differences were counterbalanced by the 17 percentage point difference in male sterilization in 1976—22 percent of white contraceptors, but only 5 percent of black contraceptors who did not intend to have more children, were using male sterilization.

The findings discussed in this section were generally similar within parity groups. The statistics for women with three or more births who intended to have more children should be interpreted very cautiously, however, because of the small number of sample cases in this group.

### Religion

For at least two decades, fertility surveys have shown religion to be associated closely with family size and contraceptive practice.[4-6] Table 13 is limited to white Protestant wives and white Catholic wives because the samples of other groups were not large enough to permit statistically reliable analysis of trends.

Three developments from 1965 to 1976 are noteworthy: (1) the decline of use of rhythm among Catholic women (figure 5), (2) the increase in use of the pill by both Protestant women and Catholic women and the convergence of the two religious groups in the percent using the pill (figure 6), and (3) the divergence between Protestant couples and Catholic couples in the use of contraceptive sterilization from 1973 to 1976.

In 1965, the leading method of contraception among Catholic contraceptors was rhythm, used by 32 percent of Catholic contraceptors, compared with 5 percent of Protestant contraceptors. The leading methods among Protestant couples in 1965 were the pill (27 percent of contraceptors) and condom (23 percent).

In 1965, sterilization was used by 14 percent of Protestant couples and only 7 percent of Catholic couples. Use of the diaphragm among Protestant contraceptors (12 percent) also was greater than among Catholic contraceptors (5 percent).

From 1965 to 1973, the percent of Catholic couples using rhythm decreased dramatically—from 32 percent in 1965 to 8 percent in 1973. The increase from 1973 to 1976 was not statistically significant; furthermore, *no* statistically significant changes were found during 1973-76 in the percent of Catholic women using any of the methods of contraception listed in table 13. In 1973 and 1976, Catholic couples were somewhat more likely to use rhythm than Protestant couples, but rhythm was used by less than 1 in 10 Catholic contraceptors in both years.

In 1965, 18 percent of Catholic contraceptors used the pill. By 1973, the proportion of Catholic

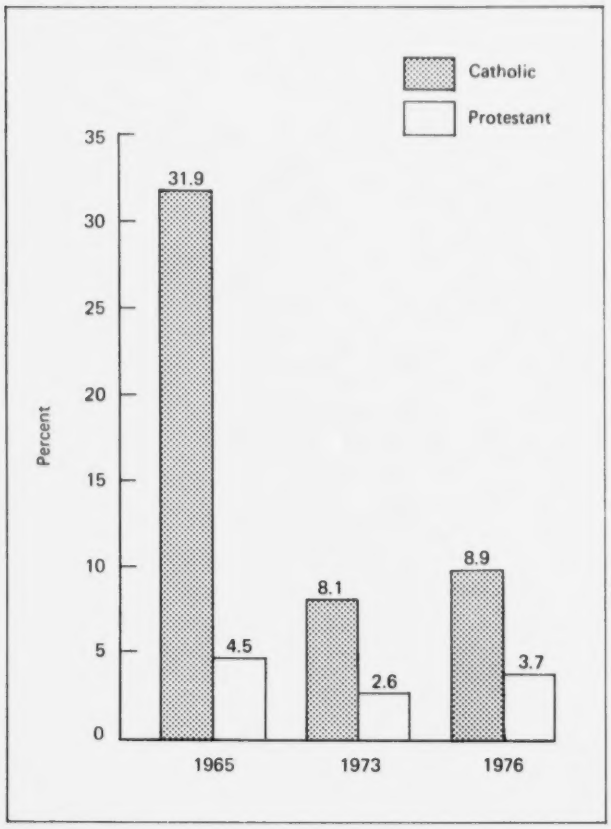


Figure 5. Percent of currently married white contraceptors 15-44 years of age using the rhythm method, by religion: United States, 1965, 1973, and 1976

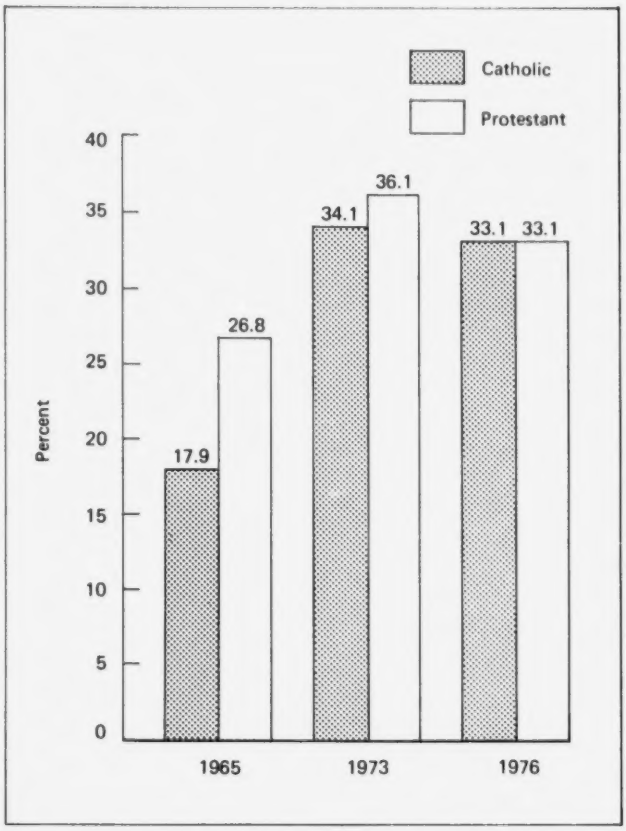


Figure 6. Percent of currently married white contraceptors 15-44 years of age using the oral contraceptive pill, by religion: United States, 1965, 1973, and 1976

contraceptors using the pill approximately doubled to 34 percent. In 1973 and 1976, the pill was the leading method among Catholic couples, used by approximately one in three contraceptors. Also in 1973 and 1976, the percent of Catholic contraceptors and Protestant contraceptors using the pill was not significantly different.

In 1965, 14 percent of Protestant contraceptors used sterilization, compared with 7 percent of Catholic contraceptors. By 1973, the percent of contraceptors using sterilization increased substantially, but the difference between Protestant couples and Catholic couples was about the same—8 percentage points. From 1973 to 1976, the dramatic increase in contraceptive sterilization among white couples[22] (table 8) did not occur among Catholic couples. Although the percent of Catholic couples using sterilization increased a nonsignificant 2 percentage points during 1973-76 (from 18 to 20 percent), the percent of Protestant contraceptors using sterilization increased from 26 percent in 1973 to 33 percent in 1976. In 1976, 33 percent of Protestant and only 20 percent of Catholic contraceptors were using sterilization—a difference of 13 percentage points, compared with differences of 7 percentage points in 1965 and 8 percentage points in 1973.

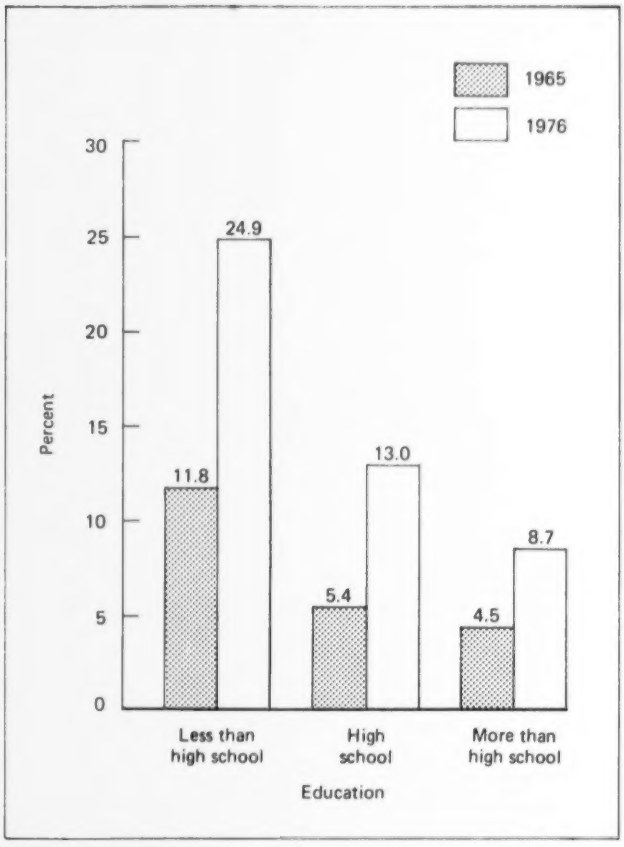


Figure 7. Percent of currently married contraceptors 15-44 years of age using female sterilization, by education: United States, 1965 and 1976

## Education

Data for women using contraception are shown according to education and race in table 14.

In 1965, the pill and condom were the leading methods of contraception in all three educational categories; each was used by approximately 1 in 4 or 1 in 5 contraceptors in each education group. The percent using the diaphragm increased sharply with education in 1965, from 4 percent of contraceptors with less than a high school education to 10 percent of high school graduates and 19 percent of contraceptors with more than a high school education.

In 1965, 12 percent of contraceptors with less than a high school education were using female sterilization, compared with 5 percent of contraceptors in the other two education groups (figure 7). Black women with less than a high school education were about twice as likely as white women to use female sterilization (23 percent compared with 10 percent) in 1965. In the other two educational groups, there was no significant difference by race in female sterilization.

The percent of contraceptors using the pill, the IUD, and sterilization increased sharply in each educational group from 1965 to 1973. The size of the increases in the pill, the IUD, or male sterilization varied little, but the increase in female sterilization from 1965 to 1973 was approximately 9 percentage points (12 percent to 21 percent) among women with less than a high school education and only 3 percentage points among women with more than a high school education.

These trends in modern methods during 1965-73 were similar for white women and black women. One striking trend from 1965 to 1973, however, was the increase in use of the pill among black women with a high school education, from 26 percent in 1965 to 53 percent in 1973.

From 1973 to 1976, sterilization increased among white couples with a high school education or more—from 23 percent to 29 percent among high school graduates and from 18 percent to 22 percent among women with more than a high school education. The percent of white contraceptors with more than a high school education using the pill decreased from 38 percent to 33 percent.

In part because of a small number of sample cases in some educational groups, only one of the changes in individual methods within education groups was statistically significant for black contraceptors from 1973 to 1976: the percent using the pill decreased from 53 to 44 percent of black contraceptors with a high school education. Many of the changes in percents using traditional methods were increases; so the percent of black couples with less than a high

school education using traditional methods increased sharply during 1973-76, from 13 percent to 23 percent. Among black high school graduates, the percent of contraceptors using traditional methods also increased, from 19 percent in 1973 to 29 percent in 1976.

In 1976, the pill and sterilization were the leading methods of contraception in each educational group. In 1976 as well as in 1965 (figure 7), the percent of contraceptors using female sterilization was greater for those with less than a high school education (25 percent in 1976) than for those with a high school education (13 percent in 1976) or more (9 percent in 1976).

In 1976, approximately 35 percent of black contraceptors compared with only 24 percent of white contraceptors with less than a high school education were using female sterilization. In the other two education groups, however, the percents of white and black contraceptors using female sterilization were not significantly different. In 1976, black contraceptors were less likely to use male sterilization than white contraceptors in each education group. This difference was larger in 1976 than in 1965 because male sterilization rose substantially among white couples but showed little change among black couples.

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Table 1. Number of currently married women 15-44 years of age, by contraceptive status, race, and selected characteristics: United States, 1976

| Characteristic | Contraceptive status and race | | | | | |
|---|---|---|---|---|---|---|
| | All women | | | Contraceptors | | |
| | All races[1] | White | Black | All races[1] | White | Black |
| | Number in thousands | | | | | |
| Total[2] | 27,488 | 24,795 | 2,169 | 18,609 | 17,051 | 1,269 |
| Age | | | | | | |
| 15-29 years | 12,463 | 11,218 | 993 | 8,589 | 7,849 | 604 |
| 15-19 years | 1,043 | 918 | 99 | 725 | 654 | 61 |
| 30-44 years | 15,024 | 13,577 | 1,177 | 10,020 | 9,202 | 664 |
| Years since first marriage | | | | | | |
| 0-4 years | 7,039 | 6,253 | 585 | 4,706 | 4,258 | 363 |
| 5-9 years | 6,389 | 5,740 | 503 | 4,492 | 4,109 | 290 |
| 10-14 years | 4,972 | 4,512 | 368 | 3,607 | 3,315 | 220 |
| 15 years or more | 8,750 | 8,048 | 627 | 5,602 | 5,215 | 348 |
| Parity and intent to have more children | | | | | | |
| All parities: | | | | | | |
| Intend no more | 16,956 | 15,412 | 1,298 | 11,970 | 11,005 | 794 |
| Intend more | 7,731 | 6,891 | 625 | 4,858 | 4,428 | 361 |
| Parity 0-2: | | | | | | |
| Intend no more | 8,961 | 8,229 | 610 | 6,167 | 5,777 | 319 |
| Intend more | 7,336 | 6,558 | 577 | 4,642 | 4,236 | 337 |
| Parity 3 or more: | | | | | | |
| Intend no more | 7,995 | 7,183 | 688 | 5,803 | 5,228 | 475 |
| Intend more | 395 | 334 | 48 | 216 | 192 | *24 |
| Religion | | | | | | |
| Protestant | 17,354 | 15,368 | 1,908 | 11,750 | 10,584 | 1,125 |
| Catholic | 7,792 | 7,336 | 165 | 5,185 | 4,942 | 86 |
| Other or none | 2,289 | 2,042 | 91 | 1,631 | 1,483 | 57 |
| Education | | | | | | |
| Less than high school | 6,272 | 5,442 | 691 | 3,767 | 3,369 | 333 |
| High school | 12,970 | 11,941 | 889 | 8,811 | 8,182 | 542 |
| More than high school | 8,198 | 7,364 | 588 | 5,990 | 5,460 | 393 |

[1]Includes white, black, and other races.
[2]Includes women for whom information on years since first marriage, intent to have more children, religion, or education was missing; also includes women who did not know whether they intended to have more children or disagreed with their husbands about it; see appendix II.

NOTE: Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for descriptions of the sample design of the survey, estimates of sampling variability, and definitions of terms.

Table 2. Number of currently married women 15-44 years of age, by contraceptive status, race, and selected characteristics: United States, 1973

| Characteristic | Contraceptive status and race | | | | | |
|---|---|---|---|---|---|---|
| | All women | | | Contraceptors | | |
| | All races[1] | White | Black | All races[1] | White | Black |
| | Number in thousands | | | | | |
| Total[2] | 26,646 | 24,249 | 2,081 | 18,548 | 17,107 | 1,249 |
| Age | | | | | | |
| 15-29 years | 12,040 | 10,963 | 964 | 8,451 | 7,756 | 614 |
| 15-19 years | 1,028 | 915 | 96 | 586 | 524 | 49 |
| 30-44 years | 14,606 | 13,286 | 1,117 | 10,097 | 9,351 | 635 |
| Years since first marriage | | | | | | |
| 0-4 years | 7,109 | 6,378 | 624 | 4,726 | 4,296 | 374 |
| 5-9 years | 5,808 | 5,289 | 424 | 4,225 | 3,866 | 282 |
| 10-14 years | 4,914 | 4,450 | 405 | 3,667 | 3,383 | 252 |
| 15 years or more | 8,815 | 8,132 | 628 | 5,930 | 5,561 | 341 |
| Parity and intent to have more children | | | | | | |
| All parities: | | | | | | |
| Intend no more | 16,426 | 15,038 | 1,241 | 12,270 | 11,393 | 781 |
| Intend more | 7,813 | 7,050 | 616 | 4,714 | 4,283 | 347 |
| Parity 0-2: | | | | | | |
| Intend no more | 7,934 | 7,343 | 512 | 5,694 | 5,380 | 278 |
| Intend more | 7,398 | 6,713 | 552 | 4,462 | 4,081 | 312 |
| Parity 3 or more: | | | | | | |
| Intend no more | 8,492 | 7,695 | 730 | 6,576 | 6,013 | 504 |
| Intend more | 415 | 337 | 64 | 252 | 203 | 35 |
| Religion | | | | | | |
| Protestant | 16,988 | 15,101 | 1,802 | 12,003 | 10,883 | 1,066 |
| Catholic | 7,684 | 7,362 | 183 | 5,109 | 4,888 | 129 |
| Other or none | 1,974 | 1,786 | 96 | 1,436 | 1,335 | 54 |
| Education | | | | | | |
| Less than high school | 7,102 | 6,134 | 867 | 4,426 | 3,898 | 458 |
| High school | 12,904 | 11,974 | 830 | 9,178 | 8,596 | 534 |
| More than high school | 6,641 | 6,141 | 384 | 4,943 | 4,613 | 256 |

[1] Includes white, black, and other races.

[2] Includes women who did not know whether they intended to have more children or disagreed with their husbands about it; see appendix II.

NOTE: Statistics are based on a sample of the household population of the conterminous United States. See references 7 and 9-12 for descriptions of the sample design of the survey, estimates of sampling variability, and definitions of terms.

Table 3. Number of currently married women 15-44 years of age in the sample, by contraceptive status, race, and selected characteristics: National Fertility Study, United States, 1965

| Characteristic | Contraceptive status and race | | | | | |
|---|---|---|---|---|---|---|
| | All women | | | Contraceptors | | |
| | All races[1] | White | Black | All races[1] | White | Black |
| | Number in sample | | | | | |
| Total[2] | 4,810 | 3,771 | 969 | 2,988 | 2,410 | 541 |
| Age | | | | | | |
| 15-29 years | 1,918 | 1,447 | 440 | 1,204 | 915 | 272 |
| 15-19 years | 212 | 155 | 54 | 113 | 84 | 26 |
| 30-44 years | 2,892 | 2,324 | 529 | 1,784 | 1,495 | 269 |
| Years since first marriage | | | | | | |
| 0-4 years | 944 | 701 | 230 | 541 | 398 | 134 |
| 5-9 years | 982 | 769 | 200 | 648 | 514 | 129 |
| 10-14 years | 983 | 769 | 196 | 661 | 532 | 121 |
| 15 years or more | 1,900 | 1,531 | 343 | 1,137 | 965 | 157 |
| Parity and intent to have more children | | | | | | |
| All parities: | | | | | | |
| Intend no more | 3,269 | 2,547 | 675 | 2,125 | 1,711 | 388 |
| Intend more | 1,273 | 1,001 | 253 | 702 | 560 | 134 |
| Parity 0-2: | | | | | | |
| Intend no more | 1,292 | 1,060 | 216 | 717 | 621 | 89 |
| Intend more | 1,041 | 821 | 205 | 552 | 441 | 103 |
| Parity 3 or more: | | | | | | |
| Intend no more | 1,977 | 1,487 | 459 | 1,408 | 1,090 | 299 |
| Intend more | 232 | 180 | 48 | 150 | 119 | 31 |
| Religion | | | | | | |
| Protestant | 3,378 | 2,432 | 891 | 2,139 | 1,613 | 494 |
| Catholic | 1,179 | 1,096 | 70 | 665 | 620 | 41 |
| Other or none | 253 | 243 | 8 | 184 | 177 | 6 |
| Education | | | | | | |
| Less than high school | 1,844 | 1,246 | 555 | 1,012 | 716 | 274 |
| High school | 2,108 | 1,790 | 302 | 1,377 | 1,171 | 198 |
| More than high school | 857 | 734 | 112 | 598 | 522 | 69 |

[1] Includes white, black, and other races.
[2] Includes women who did not know whether they intended to have more children or disagreed with their husbands about it; see appendix II.

NOTE: Statistics are based on a sample of the household population of the conterminous United States. See appendixes I and II for descriptions of the sample design of the survey, estimates of sampling variability, and definitions of terms.

Table 4. Percent distribution of currently married women 15-44 years of age, by contraceptive status, according to selected characteristics: United States, 1965, 1973, and 1976

| Characteristic | Contraceptive status | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Contraceptors | | | Pregnancy, post partum, seeking pregnancy | | | Noncontraceptively sterile | | | Other nonusers | | |
| | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 |
| | Percent of currently married women | | | | | | | | | | | |
| Total[1] | 67.7 | 69.6 | 63.2 | 13.3 | 14.3 | 15.4 | 11.4 | 7.5 | 11.6 | 7.6 | 8.7 | 9.7 |
| Age | | | | | | | | | | | | |
| 15-29 years | 68.9 | 70.2 | 63.1 | 22.2 | 23.0 | 27.2 | 3.3 | 1.3 | 3.3 | 5.6 | 5.5 | 6.4 |
| 15-19 years | 69.4 | 57.0 | 55.0 | 23.6 | 35.8 | 36.7 | *0.2 | *0.4 | *0.6 | *6.8 | 6.8 | 7.7 |
| 30-44 years | 66.7 | 69.1 | 63.3 | 5.8 | 7.0 | 7.8 | 18.2 | 12.6 | 17.0 | 9.3 | 11.3 | 11.9 |
| Years since first marriage | | | | | | | | | | | | |
| 0-4 years | 66.9 | 66.5 | 57.5 | 25.4 | 27.2 | 35.1 | 2.0 | *0.8 | 1.7 | 5.7 | 5.5 | 5.7 |
| 5-9 years | 70.3 | 72.7 | 66.3 | 20.0 | 19.2 | 21.7 | 4.3 | 1.7 | 4.5 | 5.5 | 6.4 | 7.5 |
| 10-14 years | 72.5 | 74.6 | 68.1 | 6.6 | 9.6 | 11.1 | 13.3 | 7.2 | 11.8 | 7.5 | 8.5 | 9.0 |
| 15 years or more | 64.1 | 67.3 | 61.8 | 2.6 | 3.2 | 5.1 | 22.8 | 16.8 | 19.9 | 10.5 | 12.8 | 13.1 |
| Parity and intent to have more children | | | | | | | | | | | | |
| All parities: | | | | | | | | | | | | |
| Intend no more | 70.6 | 74.7 | 66.3 | 4.1 | 4.6 | 7.2 | 17.8 | 12.1 | 17.2 | 7.5 | 8.6 | 9.4 |
| Intend more | 62.9 | 60.3 | 55.6 | 31.9 | 33.9 | 35.6 | ... | ... | ... | 5.1 | 5.7 | 8.8 |
| Parity 0-2: | | | | | | | | | | | | |
| Intend no more | 68.9 | 71.8 | 57.4 | 6.4 | 6.9 | 7.5 | 16.4 | 11.3 | 25.5 | 8.3 | 10.0 | 9.6 |
| Intend more | 63.3 | 60.3 | 53.6 | 31.9 | 34.3 | 38.3 | ... | ... | ... | 4.7 | 5.4 | 8.1 |
| Parity 3 or more: | | | | | | | | | | | | |
| Intend no more | 72.6 | 77.4 | 72.4 | 1.6 | 2.5 | 6.9 | 19.3 | 12.9 | 11.5 | 6.5 | 7.2 | 9.2 |
| Intend more | 54.8 | 60.8 | 64.7 | 31.4 | 27.6 | 23.3 | ... | ... | ... | *13.9 | *11.6 | 12.0 |
| Education | | | | | | | | | | | | |
| Less than high school | 60.1 | 62.3 | 56.5 | 13.7 | 13.9 | 15.0 | 15.0 | 10.2 | 13.3 | 11.2 | 13.5 | 15.2 |
| High school | 68.0 | 71.1 | 65.4 | 13.5 | 14.0 | 15.6 | 11.5 | 7.3 | 12.1 | 7.1 | 7.5 | 6.9 |
| More than high school | 73.1 | 74.4 | 70.5 | 12.6 | 15.1 | 15.7 | 8.6 | 4.8 | 7.4 | 5.8 | 5.7 | 6.4 |

[1] Includes women for whom information on years since first marriage, intent to have more children, or education was missing; also includes women who did not know whether they intended to have more children or disagreed with their husbands about it; see appendix II.

NOTE: Statistics are based on samples of the household population of the conterminous United States. See appendixes I and II for descriptions of the sample design of each survey, estimates of sampling variability, and definitions of terms.

Table.5. Percent distribution of currently married white women 15-44 years of age, by contraceptive status, according to selected characteristics: United States, 1965, 1973, and 1976

| Characteristic | Contraceptive status | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Contraceptors | | | Pregnancy, post partum, seeking pregnancy | | | Noncontraceptively sterile | | | Other nonusers | | |
| | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 |
| | Percent of currently married white women | | | | | | | | | | | |
| Total[1] | 68.8 | 70.5 | 64.1 | 12.7 | 14.2 | 15.2 | 11.4 | 7.4 | 11.8 | 7.1 | 7.8 | 9.0 |
| Age | | | | | | | | | | | | |
| 15-29 years | 70.0 | 70.7 | 63.4 | 21.8 | 23.0 | 27.4 | 3.1 | 1.3 | 3.2 | 5.1 | 5.0 | 6.0 |
| 30-44 years | 67.8 | 70.4 | 64.5 | 5.2 | 6.9 | 7.5 | 18.2 | 12.5 | 17.2 | 8.7 | 10.2 | 10.8 |
| Years since first marriage | | | | | | | | | | | | |
| 0-4 years | 68.1 | 67.4 | 57.2 | 24.7 | 27.0 | 35.5 | 2.0 | 0.8 | 1.7 | 5.2 | 4.9 | 5.6 |
| 5-9 years | 71.6 | 73.1 | 66.8 | 19.6 | 19.7 | 21.5 | 3.8 | 1.6 | 4.6 | 5.0 | 5.7 | 7.2 |
| 10-14 years | 73.5 | 76.0 | 69.2 | 6.1 | 9.7 | 10.8 | 13.2 | 7.2 | 11.8 | 7.2 | 7.0 | 8.2 |
| 15 years or more | 64.9 | 68.4 | 63.2 | 2.3 | 3.1 | 4.9 | 23.0 | 16.6 | 20.1 | 9.8 | 12.0 | 11.8 |
| Parity and intent to have more children | | | | | | | | | | | | |
| All parities: | | | | | | | | | | | | |
| Intend no more | 71.5 | 75.8 | 67.3 | 3.9 | 4.5 | 6.5 | 17.6 | 12.0 | 17.5 | 7.0 | 7.7 | 8.7 |
| Intend more | 64.3 | 60.8 | 56.1 | 30.7 | 34.0 | 35.9 | ... | ... | ... | 4.9 | 5.2 | 8.0 |
| Parity 0-2: | | | | | | | | | | | | |
| Intend no more | 70.3 | 73.3 | 58.8 | 5.9 | 6.8 | 7.1 | 15.9 | 10.8 | 25.5 | 7.9 | 9.1 | 8.6 |
| Intend more | 64.6 | 60.8 | 53.8 | 30.9 | 34.2 | 38.6 | ... | ... | ... | 4.4 | 5.0 | 7.6 |
| Parity 3 or more: | | | | | | | | | | | | |
| Intend no more | 72.8 | 78.1 | 73.4 | 1.5 | 2.3 | 6.1 | 19.7 | 13.1 | 11.8 | 6.0 | 6.4 | 8.7 |
| Intend more | 57.5 | 60.2 | 66.1 | *27.2 | 30.0 | 23.9 | ... | ... | ... | *15.3 | *9.8 | 10.0 |
| Religion[2] | | | | | | | | | | | | |
| Protestant | 68.9 | 72.1 | 66.5 | 12.6 | 13.2 | 12.9 | 12.6 | 8.1 | 12.6 | 6.0 | 6.7 | 8.0 |
| Catholic | 67.5 | 66.4 | 56.8 | 12.9 | 16.7 | 20.9 | 10.5 | 6.7 | 10.4 | 9.1 | 10.2 | 11.9 |
| Education | | | | | | | | | | | | |
| Less than high school | 61.9 | 63.6 | 57.8 | 13.0 | 13.9 | 14.7 | 15.2 | 10.5 | 13.8 | 9.9 | 12.1 | 13.7 |
| High school | 68.6 | 71.8 | 65.5 | 13.0 | 13.9 | 15.4 | 11.6 | 7.2 | 12.3 | 6.9 | 7.1 | 6.8 |
| More than high school | 74.1 | 75.1 | 71.1 | 12.0 | 15.0 | 15.3 | 8.4 | 4.8 | 7.4 | 5.4 | 5.1 | 6.3 |

[1]Includes women for whom information on years since first marriage, intent to have more children, religion, or education was missing; also includes women who did not know whether they intended to have more children or disagreed with their husbands about it; see appendix II.
[2]Women with religious preferences other than Protestant and Catholic and those with no religion are not shown separately because of limitations of sample size.

NOTE: Statistics are based on samples of the household population of the conterminous United States. See appendixes I and II for descriptions of the sample design of each survey, estimates of sampling variability, and definitions of terms.

Table 6. Percent distribution of currently married black women 15-44 years of age, by contraceptive status, according to selected characteristics: United States, 1965, 1973, and 1976

| Characteristic | Contraceptive status | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Contraceptors | | | Pregnancy, post partum, seeking pregnancy | | | Noncontraceptively sterile | | | Other nonusers | | |
| | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 |
| | Percent of currently married black women | | | | | | | | | | | |
| Total[1] | 58.6 | 60.0 | 56.2 | 16.4 | 14.0 | 17.9 | 11.7 | 8.1 | 9.0 | 13.3 | 17.9 | 16.9 |
| Age | | | | | | | | | | | | |
| 15-29 years | 61.0 | 63.7 | 62.2 | 23.9 | 22.8 | 26.3 | 5.4 | *1.5 | *2.1 | 9.6 | 12.0 | 9.4 |
| 30-44 years | 56.5 | 56.8 | 51.1 | 10.1 | 6.4 | 10.8 | 17.0 | 13.7 | 14.8 | 16.4 | 23.1 | 23.2 |
| Years since first marriage | | | | | | | | | | | | |
| 0-4 years | 62.2 | 60.0 | 58.5 | 25.9 | 27.3 | 32.3 | *2.6 | *1.5 | 1.3 | 9.3 | 11.2 | 7.9 |
| 5-9 years | 57.7 | 66.6 | 65.2 | 23.4 | 14.0 | 23.2 | *7.6 | *3.2 | 1.5 | 11.4 | 16.3 | 10.1 |
| 10-14 years | 59.7 | 62.1 | 62.1 | 12.5 | 9.1 | 11.8 | 17.4 | 8.2 | 10.3 | *10.4 | 20.6 | 15.9 |
| 15 years or more | 55.6 | 54.3 | 46.0 | 5.1 | *3.9 | 8.5 | 18.7 | 17.8 | 17.9 | 20.5 | 24.1 | 27.6 |
| Parity and intent to have more children | | | | | | | | | | | | |
| All parities: | | | | | | | | | | | | |
| Intend no more | 61.3 | 62.9 | 57.9 | 7.4 | 5.6 | 13.4 | 18.4 | 13.5 | 13.0 | 13.0 | 17.9 | 15.7 |
| Intend more | 58.0 | 56.4 | 53.2 | 36.3 | 31.7 | 30.6 | ... | ... | ... | *5.5 | 11.9 | 16.3 |
| Parity 0-2: | | | | | | | | | | | | |
| Intend no more | 52.3 | 54.2 | 41.4 | 12.9 | 7.4 | 13.5 | 21.5 | 16.8 | 22.8 | 13.3 | 21.5 | 22.3 |
| Intend more | 58.5 | 56.5 | 50.5 | 35.8 | 32.9 | 33.8 | ... | ... | ... | *5.4 | 10.5 | 15.7 |
| Parity 3 or more: | | | | | | | | | | | | |
| Intend no more | 69.2 | 69.0 | 65.7 | *2.6 | 4.3 | 13.4 | 15.5 | 11.2 | 8.4 | 12.6 | 15.4 | 12.5 |
| Intend more | 51.0 | 55.2 | 64.6 | *41.5 | *21.3 | 16.7 | ... | ... | ... | *7.5 | *23.5 | 18.7 |
| Education | | | | | | | | | | | | |
| Less than high school | 48.1 | 52.9 | 49.9 | 15.6 | 13.5 | 16.9 | 14.3 | 9.4 | 10.6 | 22.0 | 24.2 | 22.6 |
| High school | 61.0 | 64.3 | 65.6 | 18.0 | 14.8 | 19.2 | 11.8 | 8.0 | 6.0 | 9.2 | 12.9 | 9.3 |
| More than high school | 67.0 | 66.8 | 61.6 | 15.1 | 13.5 | 18.7 | 8.5 | *5.1 | 9.8 | 9.4 | 14.6 | 9.8 |

[1] Includes women for whom information on years since first marriage, intent to have more children, or education was missing; also includes women who did not know whether they intended to have more children or disagreed with their husbands about it; see appendix II.

NOTE: Statistics are based on samples of the household population of the conterminous United States. See appendixes I and II for descriptions of the sample design of each survey, estimates of sampling variability, and definitions of terms.

Table 7. Percent distribution of currently married women 15-44 years of age using contraception by method of contraception, according to age: United States, 1965, 1973, and 1976

| Method of contraception | Age | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 15-44 years | | | 15-29 years | | | 30-44 years | | |
| | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 |
| | Percent distribution | | | | | | | | |
| All contraceptors | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | | | | | | | | | |
| Total | 70.0 | 69.2 | 37.5 | 73.3 | 76.9 | 49.3 | 67.1 | 62.9 | 29.9 |
| Female sterilization | 14.1 | 12.3 | 7.2 | 6.3 | 5.9 | 3.2 | 20.8 | 17.7 | 9.8 |
| Male sterilization | 13.3 | 11.2 | 5.2 | 5.5 | 5.3 | 2.9 | 20.0 | 16.1 | 6.6 |
| Oral contraceptive pill | 33.2 | 36.1 | 23.9 | 51.0 | 53.6 | 41.3 | 18.0 | 21.4 | 12.7 |
| Intrauterine device (IUD) | 9.3 | 9.6 | *1.2 | 10.5 | 12.0 | 1.8 | 8.4 | 7.6 | *0.8 |
| Traditional methods | | | | | | | | | |
| Total | 30.0 | 30.8 | 62.5 | 26.7 | 23.1 | 50.7 | 32.9 | 37.1 | 70.1 |
| Diaphragm | 4.2 | 3.4 | 9.9 | 3.9 | 2.5 | 6.2 | 4.6 | 4.2 | 12.2 |
| Condom | 10.8 | 13.5 | 22.0 | 9.6 | 10.0 | 19.3 | 11.7 | 16.4 | 23.8 |
| Foam | 4.4 | 5.0 | 3.3 | 4.8 | 5.1 | 4.8 | 4.1 | 4.9 | 2.3 |
| Rhythm | 5.0 | 4.0 | 10.8 | 4.0 | 2.0 | 7.6 | 5.9 | 5.7 | 12.9 |
| Withdrawal | 3.0 | 2.1 | 5.7 | 2.4 | 1.5 | 3.2 | 3.5 | 2.7 | 7.3 |
| Douche | 1.0 | 0.8 | 5.0 | 0.6 | 0.4 | 4.3 | 1.4 | 1.2 | 5.5 |
| Other | 1.5 | 1.9 | 5.8 | 1.4 | 1.6 | 5.3 | 1.6 | 2.1 | 6.1 |

NOTE: Statistics are based on samples of the household population of the conterminous United States. See appendixes I and II for descriptions of the sample design of each survey, estimates of sampling variability, and definitions of terms.

Table 8. Percent distribution of currently married white women 15-44 years of age using contraception by method of contraception, according to age: United States, 1965, 1973, and 1976

| Method of contraception | Age | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 15-44 years | | | 15-29 years | | | 30-44 years | | |
| | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 |
| | Percent distribution | | | | | | | | |
| All contraceptors | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | | | | | | | | | |
| Total | 70.2 | 68.4 | 37.1 | 73.2 | 76.0 | 49.9 | 67.6 | 62.1 | 29.2 |
| Female sterilization | 13.9 | 11.6 | 6.5 | 6.1 | 5.7 | 2.8 | 20.5 | 16.5 | 8.7 |
| Male sterilization | 14.2 | 11.9 | 5.5 | 6.0 | 5.6 | 3.2 | 21.1 | 17.1 | 7.0 |
| Oral contraceptive pill | 32.9 | 35.6 | 24.0 | 50.6 | 52.9 | 42.4 | 17.8 | 21.2 | 12.8 |
| Intrauterine device (IUD) | 9.2 | 9.4 | *1.1 | 10.5 | 11.9 | *1.5 | 8.1 | 7.4 | *0.8 |
| Traditional methods | | | | | | | | | |
| Total | 29.8 | 31.6 | 62.9 | 26.8 | 24.0 | 50.1 | 32.4 | 37.9 | 70.8 |
| Diaphragm | 4.4 | 3.6 | 10.4 | 4.1 | 2.6 | 6.6 | 4.6 | 4.4 | 12.8 |
| Condom | 10.9 | 14.1 | 22.4 | 9.7 | 10.5 | 19.2 | 11.9 | 17.1 | 24.4 |
| Foam | 4.2 | 5.0 | 3.1 | 4.8 | 5.3 | 4.5 | 3.8 | 4.7 | 2.2 |
| Rhythm | 5.1 | 4.1 | 11.5 | 4.0 | 2.0 | 8.0 | 6.1 | 5.9 | 13.7 |
| Withdrawal | 3.0 | 2.2 | 5.8 | 2.5 | 1.5 | 3.1 | 3.4 | 2.8 | 7.4 |
| Douche | 0.8 | 0.7 | 4.1 | 0.4 | 0.3 | 3.4 | 1.2 | 1.0 | 4.5 |
| Other | 1.5 | 1.9 | 5.6 | 1.4 | 1.7 | 5.4 | 1.5 | 2.1 | 5.8 |

NOTE: Statistics are based on samples of the household population of the conterminous United States. See appendixes I and II for descriptions of the sample design of each survey, estimates of sampling variability, and definitions of terms.

Table 9. Percent distribution of currently married black women 15-44 years of age using contraception by method of contraception, according to age: United States, 1965, 1973, and 1976

| Method of contraception | Age | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 15-44 years | | | 15-29 years | | | 30-44 years | | |
| | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 |
| | Percent distribution | | | | | | | | |
| All contraceptors | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | | | | | | | | | |
| Total | 70.2 | 81.0 | 40.3 | 74.0 | 87.5 | 43.4 | 66.8 | 74.6 | 37.2 |
| Female sterilization | 18.7 | 22.7 | 15.3 | 8.6 | 9.8 | 7.4 | 27.9 | 35.2 | 23.4 |
| Male sterilization | *3.0 | *1.7 | *0.6 | *0.3 | *0.7 | *0.4 | *5.4 | *2.7 | *0.7 |
| Oral contraceptive pill | 38.0 | 43.8 | 21.6 | 56.0 | 63.9 | 30.9 | 21.5 | 24.3 | 12.3 |
| Intrauterine device (IUD) | 10.6 | 12.7 | 2.8 | 9.1 | 13.1 | 4.8 | 11.9 | 12.4 | 0.7 |
| Traditional methods | | | | | | | | | |
| Total | 29.8 | 19.0 | 59.7 | 26.0 | 12.5 | 56.6 | 33.2 | 25.4 | 62.8 |
| Diaphragm | *3.0 | *2.0 | 5.0 | *1.4 | *1.2 | 3.3 | *4.5 | *2.8 | 6.7 |
| Condom | 7.9 | 5.3 | 17.4 | 8.4 | *3.1 | 18.7 | 7.4 | 7.5 | 16.0 |
| Foam | 6.5 | 5.0 | 6.3 | 4.9 | 3.5 | 8.1 | 8.0 | 6.6 | 4.5 |
| Rhythm | *2.4 | *1.3 | 2.6 | *3.1 | *1.6 | 2.9 | *1.8 | *0.9 | 2.2 |
| Withdrawal | 3.1 | *0.7 | 4.1 | *2.6 | *0.5 | 4.0 | *3.5 | *0.9 | 4.1 |
| Douche | 4.6 | 3.0 | 16.3 | 4.0 | *2.1 | 14.0 | 5.2 | 4.0 | 18.6 |
| Other | *2.3 | *1.6 | 8.1 | *1.7 | *0.5 | 5.5 | *2.9 | *2.7 | 10.8 |

NOTE: Statistics are based on samples of the household population of the conterminous United States. See appendixes I and II for descriptions of the sample design of each survey, estimates of sampling variability, and definitions of terms.

Table 10. Percent distribution of currently married women 15-19 years of age using contraception, by method of contraception: United States, 1965, 1973, and 1976

| Method of contraception | 1976 | 1973 | 1965 |
|---|---|---|---|
| | Percent distribution | | |
| All contraceptors | 100.0 | 100.0 | 100.0 |
| Modern methods | | | |
| Total | 81.5 | 83.2 | 56.6 |
| Female sterilization | *1.1 | *0.1 | - |
| Male sterilization | - | *0.7 | - |
| Oral contraceptive pill | 71.0 | 77.0 | 51.7 |
| Intrauterine device (IUD) | *9.3 | *5.3 | *4.9 |
| Traditional methods | | | |
| Total | 18.5 | 16.8 | 43.4 |
| Diaphragm | *2.4 | *1.3 | *3.1 |
| Condom | 6.8 | *7.9 | 11.8 |
| Foam | 3.7 | *2.8 | *4.5 |
| Rhythm | *2.9 | *1.4 | *2.5 |
| Withdrawal | *1.9 | *1.4 | *5.9 |
| Douche | - | *0.1 | *9.6 |
| Other | *0.8 | *1.8 | *5.9 |

NOTE: Statistics are based on samples of the household population of the conterminous United States. See appendixes I and II for descriptions of the sample design of each survey, estimates of sampling variability, and definitions of terms.

Table 11. Percent distribution of currently married women 15-44 years of age using contraception by race and method of contraception, according to number of years since first marriage: United States, 1965, 1973, and 1976

| Race and method of contraception | Years since first marriage | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0-4 years | | | 5-9 years | | | 10-14 years | | | 15 years or more | | |
| | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 |
| | Percent distribution | | | | | | | | | | | |
| All races[1] | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | 70.1 | 77.5 | 50.3 | 72.2 | 72.0 | 42.6 | 72.4 | 66.0 | 34.6 | 66.9 | 62.7 | 30.7 |
| Female sterilization | 1.3 | 2.4 | 0.1 | 10.9 | 9.9 | *2.6 | 19.0 | 15.9 | 9.0 | 24.0 | 19.8 | 11.9 |
| Male sterilization | 1.3 | 1.8 | 0.5 | 8.6 | 8.5 | 4.4 | 19.8 | 14.9 | 5.7 | 23.2 | 18.3 | 7.4 |
| Oral contraceptive pill | 58.8 | 63.3 | 47.7 | 40.2 | 39.4 | 33.5 | 22.4 | 25.2 | 19.5 | 13.5 | 18.8 | 10.6 |
| Intrauterine device (IUD) | 8.6 | 10.0 | *2.0 | 12.5 | 14.2 | *2.1 | 11.1 | 10.0 | *0.5 | 6.3 | 5.8 | *0.8 |
| Traditional methods | 29.9 | 22.5 | 49.7 | 27.8 | 28.0 | 57.4 | 27.6 | 34.0 | 65.4 | 33.1 | 37.3 | 69.3 |
| Diaphragm | 5.6 | 2.3 | 5.0 | 4.3 | 3.1 | 9.0 | 3.7 | 3.4 | 9.8 | 3.5 | 4.6 | 12.6 |
| Condom | 9.6 | 10.3 | 16.9 | 8.9 | 11.4 | 21.2 | 10.1 | 15.0 | 24.4 | 13.8 | 16.6 | 23.3 |
| Foam | 5.4 | 4.3 | 5.4 | 4.3 | 7.2 | 3.8 | 4.5 | 6.0 | 3.7 | 3.5 | 3.4 | *1.9 |
| Rhythm | 4.2 | 2.5 | 8.9 | 4.7 | 2.6 | 10.0 | 4.8 | 4.7 | 12.3 | 5.8 | 5.8 | 11.3 |
| Withdrawal | 2.7 | 1.4 | 3.6 | 3.4 | 1.7 | 3.6 | 2.4 | 1.6 | 5.2 | 3.4 | 3.2 | 8.0 |
| Douche | 0.6 | 0.3 | 4.7 | 0.5 | 0.4 | *3.5 | 1.1 | 0.9 | 5.3 | 1.5 | 1.5 | 5.9 |
| Other | 1.8 | 1.4 | 5.2 | 1.7 | 1.7 | 6.3 | 1.1 | 2.3 | 4.7 | 1.4 | 2.2 | 6.4 |
| White | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | 69.9 | 76.9 | 52.3 | 72.5 | 71.0 | 42.6 | 72.5 | 65.5 | 33.8 | 67.3 | 61.8 | 29.7 |
| Female sterilization | *1.1 | 2.2 | - | 11.0 | 9.2 | *2.1 | 19.1 | 15.5 | 7.7 | 23.2 | 18.1 | 10.8 |
| Male sterilization | *1.4 | 2.0 | *0.5 | 9.3 | 8.9 | 4.7 | 20.8 | 15.7 | 6.2 | 24.2 | 19.3 | 7.7 |
| Oral contraceptive pill | 58.8 | 62.9 | 50.3 | 40.0 | 38.9 | 33.9 | 21.3 | 24.5 | 19.5 | 13.7 | 18.9 | 10.5 |
| Intrauterine device (IUD) | 8.5 | 9.9 | *1.5 | 12.1 | 14.1 | *1.9 | 11.2 | 9.8 | *0.4 | 6.2 | 5.5 | *0.8 |
| Traditional methods | 30.1 | 23.1 | 47.7 | 27.5 | 29.0 | 57.4 | 27.5 | 34.5 | 66.2 | 32.7 | 38.2 | 70.3 |
| Black | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | 73.0 | 86.8 | 37.3 | 73.9 | 89.5 | 38.8 | 75.2 | 69.6 | 43.0 | 64.9 | 75.9 | 42.0 |
| Female sterilization | *4.1 | *4.4 | *0.7 | *11.6 | 21.0 | 8.5 | 24.0 | 20.0 | 21.5 | 36.2 | 46.2 | 28.7 |
| Male sterilization | --- | *0.1 | *0.7 | *0.5 | *1.3 | --- | 1.7 | *4.5 | --- | *9.0 | *1.7 | *1.3 |
| Oral contraceptive pill | 59.9 | 70.9 | 29.9 | 47.8 | 51.1 | 26.4 | 35.6 | 31.7 | 19.8 | 12.0 | 16.9 | 12.1 |
| Intrauterine device (IUD) | *9.0 | 11.3 | *6.0 | 14.0 | 16.0 | *3.9 | *13.9 | 13.3 | *1.7 | *7.7 | 11.2 | --- |
| Traditional methods | 27.0 | 13.2 | 62.7 | 26.1 | 10.5 | 61.2 | 24.8 | 30.4 | 57.0 | 35.1 | 24.1 | 58.0 |

[1] Includes white, black, and other races.

NOTE: Statistics are based on samples of the household population of the conterminous United States. See appendixes I and II for descriptions of the sample design of each survey, estimates of sampling variability, and definitions of terms.

Table 12. Percent distribution of currently married women 15-44 years of age using contraception by race and method of contraception, according to parity and intent to have more children: United States, 1965, 1973, and 1976

| Race and method of contraception | Parity and intent to have more children | | | | | |
|---|---|---|---|---|---|---|
| | All parities | | | | | |
| | Intend no more | | | Intend more | | |
| | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 |
| | Percent distribution | | | | | |
| All races[1] | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | 72.9 | 68.8 | 38.1 | 65.8 | 71.2 | 39.5 |
| Female sterilization | 21.9 | 18.7 | 10.2 | ... | ... | ... |
| Male sterilization | 20.7 | 16.9 | 7.3 | ... | ... | ... |
| Oral contraceptive pill | 22.0 | 25.3 | 19.5 | 55.8 | 61.1 | 38.1 |
| Intrauterine device (IUD) | 8.4 | 7.9 | *1.2 | 10.0 | 10.1 | *1.4 |
| Traditional methods | 27.1 | 31.2 | 61.9 | 34.2 | 28.8 | 60.5 |
| Diaphragm | 3.3 | 3.5 | 11.3 | 6.4 | 3.7 | 5.8 |
| Condom | 10.6 | 13.8 | 22.4 | 10.8 | 12.6 | 19.1 |
| Foam | 3.9 | 4.3 | 2.4 | 5.8 | 5.8 | 5.5 |
| Rhythm | 4.3 | 4.3 | 9.2 | 5.5 | 3.1 | 14.3 |
| Withdrawal | 2.9 | 2.4 | 6.0 | 3.2 | 1.5 | 4.7 |
| Douche | 0.9 | 1.0 | 4.9 | 1.2 | 0.5 | 5.3 |
| Other | 1.2 | 1.9 | 5.7 | 1.2 | 1.7 | 5.7 |
| White | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | 73.3 | 67.8 | 37.3 | 65.6 | 70.8 | 40.7 |
| Female sterilization | 21.5 | 17.4 | 9.1 | ... | ... | ... |
| Male sterilization | 21.9 | 17.8 | 7.8 | ... | ... | ... |
| Oral contraceptive pill | 21.6 | 24.8 | 19.3 | 55.5 | 61.1 | 39.5 |
| Intrauterine device (IUD) | 8.3 | 7.8 | *1.1 | 10.1 | 9.7 | *1.2 |
| Traditional methods | 26.7 | 32.2 | 62.7 | 34.4 | 29.2 | 59.3 |
| Black | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | 70.9 | 81.0 | 45.4 | 69.6 | 83.0 | 27.6 |
| Female sterilization | 29.8 | 36.3 | 21.4 | ... | ... | ... |
| Male sterilization | *4.7 | *2.7 | *0.8 | ... | ... | ... |
| Oral contraceptive pill | 27.0 | 30.6 | 20.6 | 61.4 | 67.7 | 24.6 |
| Intrauterine device (IUD) | 9.4 | 11.4 | *2.6 | *8.2 | 15.3 | *3.0 |
| Traditional methods | 29.1 | 19.0 | 54.6 | 30.4 | 17.0 | 72.4 |

See footnotes at end of table.

Table 12. Percent distribution of currently married women 15-44 years of age using contraception by race and method of contraception, according to parity and intent to have more children: United States, 1965, 1973, and 1976—Con.

| Race and method of contraception | Parity and intent to have more children | | | | | |
|---|---|---|---|---|---|---|
| | Parity 0-2 | | | | | |
| | Intend no more | | | Intend more | | |
| | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 |
| | Percent distribution | | | | | |
| All races[1] | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | 72.3 | 65.7 | 30.6 | 65.7 | 72.1 | 42.9 |
| Female sterilization | 14.6 | 10.7 | 4.2 | ... | ... | ... |
| Male sterilization | 19.0 | 14.0 | 4.9 | ... | ... | ... |
| Oral contraceptive pill | 29.1 | 32.3 | 20.8 | 56.1 | 62.4 | 41.4 |
| Intrauterine device (IUD) | 9.7 | 8.6 | *0.8 | 9.7 | 9.7 | *1.5 |
| Traditional methods | 27.7 | 34.3 | 69.4 | 34.3 | 27.9 | 57.1 |
| Diaphragm | 3.9 | 3.5 | 14.8 | 6.4 | 3.7 | 6.7 |
| Condom | 10.3 | 16.0 | 29.0 | 11.4 | 11.9 | 20.7 |
| Foam | 4.3 | 5.0 | 2.5 | 5.6 | 6.0 | 4.7 |
| Rhythm | 3.4 | 3.7 | 6.2 | 5.5 | 2.5 | 9.7 |
| Withdrawal | 3.7 | 3.0 | 5.9 | 3.1 | 1.4 | 4.2 |
| Douche | 1.0 | 1.2 | 5.6 | 1.0 | 0.5 | 5.6 |
| Other | 1.0 | 2.0 | 5.4 | 1.3 | 1.8 | 5.5 |
| White | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | 73.2 | 65.1 | 30.3 | 65.5 | 71.6 | 44.4 |
| Female sterilization | 14.5 | 10.0 | 3.5 | ... | ... | ... |
| Male sterilization | 20.2 | 14.5 | 5.0 | ... | ... | ... |
| Oral contraceptive pill | 28.8 | 31.6 | 21.1 | 55.7 | 62.3 | 43.1 |
| Intrauterine device (IUD) | 9.6 | 9.0 | *0.6 | 9.7 | 9.3 | *1.4 |
| Traditional methods | 26.8 | 34.9 | 69.7 | 34.5 | 28.4 | 55.6 |
| Black | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | 62.3 | 76.3 | 34.8 | 70.2 | 82.4 | 28.2 |
| Female sterilization | 17.7 | 24.2 | 9.0 | ... | ... | ... |
| Male sterilization | *0.3 | *3.6 | *3.4 | ... | ... | ... |
| Oral contraceptive pill | 35.7 | 45.3 | 19.1 | 62.1 | 69.1 | 25.2 |
| Intrauterine device (IUD) | *8.7 | *3.3 | *3.4 | *8.1 | 13.3 | *2.9 |
| Traditional methods | 37.7 | 23.7 | 65.2 | 29.8 | 17.6 | 71.8 |

See footnotes at end of table.

Table 12. Percent distribution of currently married women 15-44 years of age using contraception by race and method of contraception, according to parity and intent to have more children: United States, 1965, 1973, and 1976—Con.

| Race and method of contraception | Parity and intent to have more children | | | | | |
|---|---|---|---|---|---|---|
| | Parity 3 or more | | | | | |
| | Intend no more | | | Intend more | | |
| | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 |
| | Percent distribution | | | | | |
| All races[1] | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | 73.6 | 71.4 | 42.2 | 67.2 | 55.7 | 26.8 |
| Female sterilization | 29.6 | 25.6 | 13.4 | ... | ... | ... |
| Male sterilization | 22.6 | 19.5 | 8.6 | ... | ... | ... |
| Oral contraceptive pill | 14.4 | 19.1 | 18.8 | 50.1 | 37.6 | 25.8 |
| Intrauterine device (IUD) | 7.0 | 7.3 | *1.4 | *17.1 | *18.1 | *1.0 |
| Traditional methods | 26.4 | 28.6 | 57.8 | *32.8 | 44.3 | 73.2 |
| Diaphragm | 2.7 | 3.5 | 9.4 | *5.0 | *2.7 | *2.6 |
| Condom | 10.8 | 11.8 | 18.8 | - | 25.0 | 13.2 |
| Foam | 3.4 | 3.8 | 2.4 | 12.1 | *2.0 | 8.6 |
| Rhythm | 5.3 | 4.9 | 10.8 | *5.7 | *12.5 | 31.5 |
| Withdrawal | 2.0 | 1.9 | 6.0 | *5.0 | *2.1 | 6.4 |
| Douche | 0.8 | 0.8 | 4.6 | *5.0 | - | *4.5 |
| Other | 1.4 | 1.8 | 5.8 | - | - | 6.4 |
| White | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | 73.5 | 70.2 | 41.3 | 68.0 | 53.8 | 26.9 |
| Female sterilization | 29.2 | 24.0 | 12.3 | ... | ... | ... |
| Male sterilization | 23.8 | 20.8 | 9.4 | ... | ... | ... |
| Oral contraceptive pill | 13.8 | 18.7 | 18.3 | 49.9 | 37.1 | 26.1 |
| Intrauterine device (IUD) | 6.8 | 6.7 | *1.3 | *18.1 | *16.8 | *0.8 |
| Traditional methods | 26.5 | 29.8 | 58.7 | *32.0 | 46.2 | 73.1 |
| Black | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | 76.7 | 83.6 | 48.5 | *61.0 | 88.9 | 25.8 |
| Female sterilization | 38.0 | 43.0 | 25.1 | ... | ... | ... |
| Male sterilization | *7.7 | *2.2 | ... | ... | ... | ... |
| Oral contraceptive pill | 21.1 | 22.4 | 21.1 | *51.5 | 55.6 | 22.6 |
| Intrauterine device (IUD) | 9.9 | 15.9 | *2.3 | *9.4 | *33.3 | *3.2 |
| Traditional methods | 23.3 | 16.4 | 51.5 | *39.0 | *11.1 | 74.2 |

[1] Includes white, black, and other races.

NOTE: Statistics are based on samples of the household population of the conterminous United States. See appendixes I and II for descriptions of the sample design of each survey, estimates of sampling variability, and definitions of terms.

Table 13. Percent distribution of currently married white women 15-44 years of age using contraception by method of contraception, according to religion: United States, 1965, 1973, and 1976

| Method of contraception | Religion[1] | | | | | |
|---|---|---|---|---|---|---|
| | Protestant | | | Catholic | | |
| | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 |
| | Percent distribution | | | | | |
| All contraceptors | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | | | | | | |
| Total | 74.5 | 71.3 | 42.0 | 63.0 | 62.6 | 25.0 |
| Female sterilization | 16.3 | 12.6 | 7.4 | 10.3 | 10.5 | *4.4 |
| Male sterilization | 16.8 | 13.8 | 6.7 | 9.9 | 7.9 | *2.1 |
| Oral contraceptive pill | 33.1 | 36.1 | 26.8 | 33.1 | 34.1 | 17.9 |
| Intrauterine device (IUD) | 8.2 | 8.8 | *1.1 | 9.7 | 10.0 | *0.6 |
| Traditional methods | | | | | | |
| Total | 25.5 | 28.7 | 58.0 | 37.0 | 37.4 | 75.0 |
| Diaphragm | 3.2 | 3.6 | 11.7 | 4.1 | 2.6 | 4.5 |
| Condom | 9.9 | 12.7 | 23.1 | 12.7 | 15.9 | 19.0 |
| Foam | 4.0 | 5.2 | 3.3 | 4.8 | 4.9 | *1.8 |
| Rhythm | 3.7 | 2.6 | 4.5 | 8.9 | 8.1 | 31.9 |
| Withdrawal | 2.4 | 1.9 | 5.0 | 4.2 | 3.1 | 8.7 |
| Douche | 1.0 | 0.7 | 4.5 | 0.4 | 0.6 | *3.5 |
| Other | 1.3 | 1.9 | 5.9 | 2.0 | 2.3 | 5.5 |

[1]Women with religious preferences other than Protestant and Catholic and those with no religion are not shown separately because of limitations of sample size.

NOTE: Statistics are based on samples of the household population of the conterminous United States. See appendixes I and II for descriptions of the sample design of each survey, estimates of sampling variability, and definitions of terms.

Table 14. Percent distribution of currently married women 15-44 years of age using contraception by race and method of contraception, according to education: United States, 1965, 1973, and 1976

| Race and method of contraception | Education | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Less than high school | | | High school | | | More than high school | | |
| | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 | 1976 | 1973 | 1965 |
| | Percent distribution | | | | | | | | |
| All races[1] | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | 76.7 | 74.0 | 40.5 | 70.6 | 67.9 | 35.1 | 64.7 | 67.5 | 38.3 |
| Female sterilization | 24.9 | 21.4 | 11.8 | 13.0 | 10.7 | 5.4 | 8.7 | 7.2 | 4.5 |
| Male sterilization | 11.3 | 11.2 | 5.6 | 14.9 | 11.5 | 5.0 | 12.4 | 10.7 | 5.1 |
| Oral contraceptive pill | 31.9 | 32.4 | 22.1 | 34.0 | 36.8 | 23.7 | 32.9 | 38.2 | 26.9 |
| Intrauterine device (IUD) | 8.6 | 8.9 | *1.1 | 8.7 | 8.9 | *1.0 | 10.7 | 11.5 | *1.8 |
| Traditional methods | 23.3 | 26.0 | 59.5 | 29.4 | 32.1 | 64.9 | 35.3 | 32.5 | 61.7 |
| Diaphragm | *2.0 | 1.8 | 4.0 | 3.1 | 2.6 | 10.1 | 7.5 | 5.5 | 18.5 |
| Condom | 7.7 | 11.0 | 21.9 | 10.8 | 15.4 | 23.0 | 12.7 | 12.2 | 19.9 |
| Foam | 3.3 | 3.2 | 3.6 | 4.8 | 5.3 | 2.6 | 4.6 | 6.1 | 4.4 |
| Rhythm | 3.5 | 3.7 | 6.5 | 5.3 | 4.0 | 13.8 | 5.5 | 4.2 | 10.7 |
| Withdrawal | 3.7 | 2.5 | 8.2 | 3.0 | 2.5 | 5.7 | 2.6 | 1.1 | *1.6 |
| Douche | 2.1 | 1.4 | 7.6 | 1.0 | 0.8 | 4.5 | 0.5 | 0.5 | *2.2 |
| Other | *1.0 | 2.5 | 7.7 | 1.4 | 1.7 | 5.2 | 1.9 | 1.8 | 4.3 |
| White | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | 76.9 | 72.7 | 40.1 | 70.6 | 66.9 | 34.7 | 65.2 | 67.6 | 38.5 |
| Female sterilization | 24.3 | 19.9 | 10.2 | 12.9 | 10.4 | 5.1 | 8.7 | 6.8 | 4.4 |
| Male sterilization | 11.9 | 12.3 | 6.1 | 15.9 | 12.1 | 5.2 | 13.1 | 11.1 | 5.4 |
| Oral contraceptive pill | 32.5 | 32.1 | 22.9 | 33.2 | 35.6 | 23.5 | 32.7 | 38.3 | 26.8 |
| Intrauterine device (IUD) | 8.3 | 8.4 | *0.8 | 8.5 | 8.8 | *0.9 | 10.7 | 11.4 | *1.9 |
| Traditional methods | 23.1 | 27.3 | 59.9 | 29.4 | 33.1 | 65.3 | 34.8 | 32.4 | 61.5 |
| Black | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Modern methods | 76.9 | 86.6 | 43.4 | 70.7 | 81.1 | 37.4 | 63.9 | 70.5 | 36.2 |
| Female sterilization | 34.8 | 35.5 | 22.6 | 16.0 | 16.7 | 8.1 | *8.8 | 12.4 | *7.2 |
| Male sterilization | *2.4 | *1.5 | *0.7 | *2.0 | *1.6 | ... | *4.7 | *2.3 | *1.4 |
| Oral contraceptive pill | 26.7 | 34.8 | 16.8 | 44.0 | 53.4 | 26.3 | 39.3 | 39.9 | 27.5 |
| Intrauterine device (IUD) | 13.0 | 14.8 | *3.3 | 8.7 | 9.4 | *3.0 | 11.1 | 16.0 | ... |
| Traditional methods | 23.1 | 13.4 | 56.6 | 29.3 | 18.9 | 62.6 | 36.1 | 29.5 | 63.8 |

[1] Includes white, black, and other races.

NOTE: Statistics are based on samples of the household population of the conterminous United States. See appendixes I and II for descriptions of the sample design of each survey, estimates of sampling variability, and definitions of terms.

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# Appendix I. Technical notes

## Background

This report is one of a series based on the National Survey of Family Growth (NSFG) conducted by the National Center for Health Statistics (NCHS). The NSFG was designed to provide data on fertility, family planning, and aspects of maternal and child health that are closely related to childbearing.

The NSFG is a periodic survey based on personal interviews with a nationwide sample of women. A detailed description of the methods and procedures used in Cycle I of the NSFG can be found in "National Survey of Family Growth, Cycle I: Sample Design, Estimation Procedures, and Variance Estimation," Series 2, No. 76, of *Vital and Health Statistics*.[7] The present report is based on Cycle II of the NSFG. A detailed description of the methods and procedures of Cycle II can be found in "National Survey of Family Growth, Cycle II: Sample Design, Estimation Procedures, and Variance Estimation," Series 2, No. 87 of *Vital and Health Statistics*.[8] This appendix presents a summary discussion of the more important technical aspects of Cycle II.

Fieldwork for Cycle II was carried out under a contract with NCHS by Westat, Inc., between January and September of 1976. The sample is representative of women 15-44 years of age in the household population of the conterminous United States who were ever married or had coresident offspring. Interviews were completed with 8,611 women; 3,009 respondents were black women, and the other 5,602 respondents were of races other than black.

The interview focused on the respondents' marital and pregnancy histories, their use of contraception and the planning status of each pregnancy, their use of maternal care and family planning services, fecundity impairments and their expectations about future births, and a wide range of social and economic characteristics. Although the time required to complete the interviews varied considerably, the average Cycle II interview lasted about 58 minutes.

NOTE: A list of references follows the text.

## Statistical design

The NSFG is based on a multistage area probability sample. Black households were sampled at higher rates than other households so that reliable estimates of statistics could be presented separately for white and black women. In addition, the sample was designed to provide tabulations for each of the four major geographic regions of the United States.

The first stage of the sample design consisted of drawing a sample of primary sampling units (PSU's). A PSU consisted of a county, a small group of contiguous counties, or standard metropolitan statistical area as defined by the U.S. Bureau of the Census in 1970. The second and third stages of sampling were used to select several segments (clusters of 15 to about 60 dwelling units) within each PSU. A systematic sample of dwelling units was then selected from each segment. Each sample dwelling unit was visited by an interviewer who listed all household members. If a woman 15-44 years of age, ever-married or never-married with offspring in household was listed as being in the household, an extended interview was conducted. If more than one woman in the household met the eligibility criteria, one of the women was randomly selected for an extended interview.

The statistics in this report are estimates for the national population and were computed by multiplying each sample case by the number of women she represented in the population. The multipliers, or final weights, ranged from 647 to 43,024 and averaged 3,822. They were derived by using three basic steps:

- *Inflation by the reciprocal of the probability of selection.*—The probability of selection is the product of the probabilities of selection of the

PSU, segment, household, and sample person within the household.

- *Nonresponse adjustment.*—The weighted estimates were ratio adjusted for nonresponse by a multiplication of two factors. The first factor adjusted for nonresponse to the screener by imputing the characteristics of women in responding households to women in nonresponding households in the same PSU and stratum. The second factor adjusted for nonresponse to the interview by imputing the characteristics of responding women to nonresponding women in the same age-race category and PSU. Response to the screener was 93.8 percent; the response to the interview was 88.2 percent, yielding a combined response rate of approximately 82.7 percent.
- *Poststratification by marital status, age, and race.*—The estimates were ratio adjusted within each of the 12 age-race categories to an independent estimate of the population of ever-married women. The independent estimates were derived from the U.S. Bureau of the Census Current Population Surveys of March 1971-March 1976. The numbers of never-married women with coresident offspring were inflated by the first and second steps only.

The effect of the ratio-estimating process was to make the sample more closely representative of the population of women 15-44 years of age living in households in the conterminous United States, who were ever married or with coresident offspring. The final poststratification reduced the sample variance of the estimates for most statistics.

All figures were individually rounded; aggregate figures (numbers) were rounded to the nearest thousand. Aggregate numbers and percents may not sum to the total because of the rounding.

### Measurement process

Field operations for Cycle II were carried out by Westat, Inc., under contract with NCHS; these operations included pretesting the interview schedule, selecting the sample, interviewing respondents, and performing specified quality control checks. Interviewers, all of whom were female, were trained for 1 week prior to fieldwork. The first five interview schedules were reviewed; after a high level of quality was achieved by an interviewer, this review was reduced to a sample of questionnaires, unless an unacceptable level of accuracy was found. A 10-percent sample of respondents was recontacted by telephone to verify that the interview had taken place and that certain key items were accurately recorded.

A portion of the interview schedule applicable to this report is reproduced in appendix III. The complete schedule for currently married women was reprinted elsewhere.[17] Two different forms of the questionnaire were used, one for interviewing currently married women and the other for interviewing widowed, divorced, separated, or never-married women with coresident offspring. The two forms differed mainly in wording when reference was made to the husband; some questions in one schedule did not appear in the other.

### Data reduction

The responses of each woman to the interview questions were translated into predetermined numerical codes, and these code numbers were recorded on computer tapes. The first few questionnaires coded by each coder were checked completely; after an acceptable level of quality was reached, verification of coding was performed on a systematic sample of each coder's questionnaires. The data were edited by computer to identify inconsistencies between responses, as well as code numbers that were not allowed in the coding scheme; these errors were corrected.

Missing data on age and race were imputed because they were used in the nonresponse adjustments and for poststratification purposes. Unlike Cycle I, however, other missing data were not imputed to expedite release of the data. Therefore, percents and other statistics in Cycle II were based on cases with known data. For most variables, the level of missing data was less than 1 percent. The level of missing data is noted in the "Definitions of Terms" for each item that was missing 2 percent or more of the responses. For those few variables for which missing data may pose a problem for analysis (e.g., poverty level income), this fact is noted in the text.

### Reliability of estimates

Because the statistics presented in this report are based on a sample, they may differ somewhat from the figures that would have been obtained if a complete census had been taken using the same questionnaires, instructions, interviewing personnel, and field procedures. This chance difference between sample results and a complete count is referred to as sampling error.

Sampling error is measured by a statistic called the standard error of estimate. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete count by less than the standard error. The chances are about 95 out of 100 that the difference between the sample estimate and a complete count would be less than twice the standard error. The relative standard error of an estimate is obtained by dividing the standard error of the esti-

NOTE: A list of references follows the text.

mate by the estimate itself, and is expressed as a percent of the estimate. Numbers and percents that have a relative standard error that is more than 25 percent are considered unreliable. These figures are marked with an asterisk to caution the user, but may be combined to make other types of comparisons of greater reliability.

*Estimation of standard errors.*—Because of the complex multistage design of the NSFG sample, conventional formulas for calculating sampling errors are inapplicable. Standard errors were, therefore, estimated empirically by using a technique known as balanced half-sample replication. This technique produces highly reliable, unbiased estimates of sampling errors. Its application to the NSFG has been described elsewhere.[7,8]

Because it would be prohibitively expensive to estimate, and cumbersome to publish, a standard error for each percent or other statistic by this technique, standard errors were computed for selected statistics and population subgroups that were chosen to represent a wide variety of demographic characteristics and a wide variation in the size of the estimates themselves. Curves were then fitted to the relative standard error estimates (ratio of the standard error to the estimate itself) for numbers of women according to the model

$$\mathrm{RSE}\ (N') = (A + B/N')^{1/2}$$

where $N'$ is the number of women and $A$ and $B$ are the parameters whose estimates determine the shape of the curve. Separate curves were fitted for women of all races combined, for black women, and for women of races other than black, because different sampling rates were used for black and other women. The estimates of $A$ and $B$ are shown in table I.

To calculate the estimated standard error or relative standard error of an aggregate or percent, the appropriate estimates of $A$ and $B$ are used in the equations:

$$\mathrm{RSE}_{N'} = (A + B/N')^{1/2}$$

$$\mathrm{SE}_{N'} = (A + B/N')^{1/2} \times N'$$

$$\mathrm{RSE}_{P'} = (B/P' \times (100 - P')/X')^{1/2}$$

$$\mathrm{SE}_{P'} = (B \times P' \times (100 - P')/X')^{1/2}$$

where

$N'$ = number of women
$P'$ = percent
$X'$ = number of women in the denominator of the percent
SE = standard error
RSE = relative standard error

Tables II and III show some illustrative standard errors of aggregates and percents of currently married women of all races from Cycle II of the NSFG.

*Testing differences.*—The standard error of a difference between two comparative statistics, such as the proportion surgically sterile among white couples compared with black couples, is approximately the square root of the sum of the squares of the standard errors of the statistics considered separately, or calculated by the formula,

if

$$d = P'_1 - P'_2$$

then

$$\sigma_d = \sqrt{(P'_1)^2 \cdot (\mathrm{RSE}_{P'_1})^2 + (P'_2)^2 \cdot (\mathrm{RSE}_{P'_2})^2}$$

where $P'_1$ is the estimated percent for one group and $P'_2$ is the estimated percent for the other group, and $\mathrm{RSE}_{P'_1}$ and $\mathrm{RSE}_{P'_2}$ are the relative standard errors of

Table I. Parameters used to compute estimated standard errors and relative standard errors of numbers and percents of women, by marital status and race: 1976 National Survey of Family Growth

| Marital status and race | Parameter | |
|---|---|---|
| | A | B |
| Currently married | | |
| All races | -0.0001858989 | 6751.0619 |
| Black | -0.0006310400 | 2798.6440 |
| White and other | -0.0002056235 | 7021.1665 |
| Ever married | | |
| All races | 0.0001700390 | 6486.5185 |
| Black | -0.0004520643 | 2848.2362 |
| White and other | 0.0000422037 | 7111.5185 |

Table II. Approximate relative standard errors and standard errors for estimated numbers of currently married women of all races combined: 1976 National Survey of Family Growth

| Size of estimate | Relative standard error | Standard error |
|---|---|---|
| 50,000 | 36.7 | 18,000 |
| 100,000 | 25.9 | 26,000 |
| 500,000 | 11.5 | 58,000 |
| 1,000,000 | 8.1 | 81,000 |
| 3,000,000 | 4.5 | 136,000 |
| 5,000,000 | 3.4 | 171,000 |
| 7,000,000 | 2.8 | 195,000 |
| 10,000,000 | 2.2 | 221,000 |
| 20,000,000 | 1.2 | 246,000 |

NOTE: A list of references follows the text.

Table III. Approximate standard errors expressed in percentage points for estimated percents of currently married women of all races combined: 1976 National Survey of Family Growth

| Base of percent | Estimated percent | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2 or 98 | 5 or 95 | 7 or 93 | 10 or 90 | 15 or 85 | 20 or 80 | 30 or 70 | 40 or 60 | 50 |
| | Standard error in percentage points | | | | | | | | |
| 100,000 | 3.6 | 5.7 | 6.6 | 7.8 | 9.3 | 10.4 | 11.9 | 12.7 | 13.0 |
| 500,000 | 1.6 | 2.5 | 3.0 | 3.5 | 4.2 | 4.7 | 5.3 | 5.7 | 5.8 |
| 1,000,000 | 1.2 | 1.8 | 2.1 | 2.5 | 2.9 | 3.3 | 3.8 | 4.0 | 4.1 |
| 3,000,000 | 0.7 | 1.0 | 1.2 | 1.4 | 1.7 | 1.9 | 2.2 | 2.3 | 2.4 |
| 5,000,000 | 0.5 | 0.8 | 0.9 | 1.1 | 1.3 | 1.5 | 1.7 | 1.8 | 1.8 |
| 7,000,000 | 0.4 | 0.7 | 0.8 | 0.9 | 1.1 | 1.2 | 1.4 | 1.5 | 1.6 |
| 10,000,000 | 0.4 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 | 1.2 | 1.3 | 1.3 |
| 20,000,000 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.7 | 0.8 | 0.9 | 0.9 |

Example of use of table III: If 30 percent of currently married women in a specific category used the oral contraceptive pill and the base of that percent was 10,000,000, then the 30-percent column and the 10,000,000 row would indicate that 1 standard error is 1.2 percentage points and 2 standard errors are twice that, or 2.4 percentage points. Therefore, the chances are about 95 out of 100 that the true percent in the population was between 27.6 and 32.4 percent (30.0 percent ± 2.4 percent). This is called a 95-percent confidence interval. In addition, the relative standard error of that 30-percent estimate is 1.2 percent divided by 30 percent or 4.0 percent.

$P'_1$ and $P'_2$, respectively. This formula will represent the actual standard error quite accurately for the difference between separate and uncorrelated characteristics although it is only a rough approximation in most other cases.

A statistically significant difference among comparable proportions or other statistics from two or more subgroups is sufficiently large when a difference of that size or larger would be expected by chance in less than 5 percent of repeated samples of the same size and type if no true difference existed in the populations sampled. Such a difference would be statistically significant at the 0.05 level. By this criterion, if the observed difference or a larger one could be expected by chance in more than 5 percent of repeated samples, then one cannot be sufficiently confident to conclude that a real difference exists between the populations. When an observed difference is large enough to be statistically significant, the true difference in the population is estimated to lie between the observed difference plus or minus 2 standard errors of that difference in 95 out of 100 samples.

Although the 5-percent criterion is conventionally applied, it is in a sense arbitrary; depending on the purpose of the particular comparison, a different level of significance may be more useful. For greater confidence one would test for significance at the 0.01 (1-percent) level, but if one can accept a 10-percent chance of concluding a difference exists when there actually is none in the population, a test of significance at the 0.10 level would be appropriate.

The term "similar" means that any observed difference between two estimates being compared is not statistically significant, but terms such as "greater," "less," "larger," and "smaller" indicate that the observed differences are statistically significant at the 0.05 level, by using a two-tailed $t$-test with 40 degrees of freedom. Statements about differences that are qualified in some way (e.g., by the phrases "the data suggest" or "some evidence") indicate that the difference is significant at the 0.10 level but not the 0.05 level.

When a substantial difference observed is found not to be statistically significant, one should not conclude that no difference exists, but simply that such a difference cannot be established with 95-percent confidence from this sample. Lack of comment in the text about any two statistics does *not* mean that the difference was tested and found not to be significant.

The number of replicates in the balanced half-sample replication design (40 for Cycle II) can reasonably be used as an estimate of the number of degrees of freedom, although the exact value of the degrees of freedom is unknown. Therefore, in this report, differences between sample statistics are compared by using a two-tailed $t$-test with 40 degrees of freedom.

*Example*: In 1976, 29.0 percent of 24,795,000 currently married white women or their husbands had been surgically sterilized, compared with 21.6 percent of 2,169,000 currently married black women or their husbands. To test this racial difference at the 0.05 level of significance, compute

$$t = \frac{29.0 - 21.6}{\sqrt{(29.0)^2 \cdot \mathrm{RSE}^2_{(29.0)} + (21.6)^2 \cdot \mathrm{RSE}^2_{(21.6)}}}$$

By using the parameters from table I in the formula for the RSE of a percent,

$$\mathrm{RSE}_{(29.0)} = \sqrt{\frac{7021.1665}{29.0} \cdot \frac{(100 - 29.0)}{24,795,000}}$$

$$= 0.026$$

and

$$RSE_{(21.6)} = \sqrt{\frac{2798.6440}{21.6} \cdot \frac{(100 - 21.6)}{2{,}169{,}000}}$$

$$= 0.068$$

Thus

$$t = \frac{29.0 - 21.6}{\sqrt{(29.0)^2(0.026)^2 + (21.6)^2(0.068)^2}}$$

$$= 4.48$$

The two-tailed 0.95 critical value $(1 - \alpha)$ for a $t$ statistic with 40 degrees of freedom is 2.02. Therefore, the difference is significant at the 0.05 level.

### Nonsampling error

Although sampling error affects the precision or reliability of survey estimates, nonsampling error introduces bias. To minimize nonsampling error, stringent quality control procedures were introduced at every stage of the survey including a check on completeness of the household listing; extensive training and practice of interviewers; field editing of questionnaires; short verification interviews with a subsample of respondents; verification of coding and editing; an independent recode of a sample of questionnaires by NCHS; keypunch verification; and an extensive computer "cleaning" to check for inconsistent responses, missing data, and invalid codes. A detailed description of some of these procedures follows; others were previously discussed.

The results of any survey are subject to at least four types of potential nonsampling error including interview nonresponse; nonresponse to individual questions or items within the interview; inconsistency of responses to questions; and errors of recording, coding, and keying by survey personnel.

A discussion of interview nonresponse and item nonresponse follows. The third and fourth types of errors cannot be accurately measured, but the quality control procedures (some of which are discussed under "Measurement Process" and "Data Reduction") of the survey were designed to reduce such nonsampling errors to a minimum.

*Interview nonresponse.*—Interview nonresponse occurs when no part of an interview is obtained. It can result from failures at any of three principal steps: (1) failing to list all households in sample segments, (2) failing to screen all listed households, and (3) failing to interview an eligible woman in each screened household. A discussion of these steps follows.

The completeness of listing cannot be tested directly because it requires an independent, accurate enumeration of the households that should have been listed. In the NSFG, listing completeness and accuracy were tested indirectly in two ways. First, an independent relisting of about 20 percent of the segments was performed, and any differences between the two lists were pointed out to listers by supervisory staff and reconciled. Second, listing accuracy was tested by the missed dwelling unit (DU) procedure at the time of screening: if the first structure in a segment was included in the sample, the whole segment was checked to see if any structures had been missed in the listing process; if the first structure was a multiple-DU structure, the entire structure was checked for missed DU's. About 700 dwelling units, or about 2 percent of the sample of DU's designated for screening, were included in the sample as a result of the missed DU procedure.

Of the original sample of 32,653 DU's screened, 5,490 were found vacant, not DU's, or group quarters. Of the remaining DU's, 6.2 percent were not screened successfully. This figure included 2.5 percent refusals to have household members listed, 0.4 percent with language problems, 1.7 percent where no one could be found at home, and 1.7 percent for other reasons such as being refused access to the unit or because of illness.

Of the 25,480 households for which screening was completed, 10,202 were found to contain an eligible respondent. However, interviews were not completed in 11.8 percent of these cases because of refusals by the eligible respondents (5.8 percent), language problems (0.6 percent), no contact after repeated calls (1.8 percent), or other problems (3.6 percent).

The nonresponse adjustment for interview nonresponse described earlier imputes the characteristics of responding women of the same age group, race, marital status, and geographic area to nonresponding women.

*Item nonresponse.*—Item nonresponse may have occurred when a respondent refused to answer a question or did not know the answer to a question, when the question was erroneously not asked or the answer was not recorded by the interviewer, or where the answer was not codable. Nonresponse to individual questions was very low in Cycle II, as in Cycle I. Some examples of item nonresponse among a total of 8,611 respondents are number of pregnancies, 3 cases; religion of respondent, 17 cases; religion of husband, 232 cases; education, 14 cases; occupation, 185 cases; and poverty level income, 1,348 cases. Most of the items with relatively high levels of missing data were characteristics of the respondent's current or last husband, and the sources and amount of income.

Unlike Cycle I of the NSFG, missing data items were not imputed in Cycle II, except for a few re-

spondents with missing information on age and race, which were required for the nonresponse and poststratification adjustments. A small amount of missing data was tolerated in Cycle II to facilitate faster release of data and data tapes from the NSFG. Assignment of missing data codes and editing of selected variables was performed by the NSFG staff when necessary or desirable for analysis, as explained in the appropriate section of the definitions.

As with all survey data, responses to the NSFG are subject to possible deliberate misreporting by the respondent. Such misreporting cannot be detected directly, but it can be detected indirectly by the extensive computer "cleaning" and editing procedures used in the NSFG.

### The 1965 National Fertility Study

The 1965 National Fertility Study (NFS) collected information on fertility and family planning from a nationally representative area probability sample of currently married women born since July 1, 1910 (15-55 years of age) and living with their husbands in the conterminous United States. The survey was conducted by Norman B. Ryder and Charles F. Westoff of the Office of Population Research, Princeton University, under contract with the National Institute of Child Health and Human Development of the U.S. Public Health Service.

National Analysts, Inc. of Philadelphia drew the sample, conducted the interviews, edited and coded the questionnaires, and prepared the basic data file. A total of 5,617 women were interviewed, including 4,810 women 15-44 years of age. The interview completion rate in the NFS (the number of successfully completed interviews divided by the number of women eligible to be interviewed) was 88 percent. Of the 12 percent not interviewed, approximately two-thirds, or 8 percent, refused to be interviewed; the remaining 4 percent were cases in which no one was at home and other miscellaneous reasons. Further discussion of the design and conduct of the 1965 NFS may be found in the full report of the study.[4]

### Standard errors

Standard errors for the 1965 NFS are measures of sampling variability—the variation that occurs because a sample of women (rather than all women) was interviewed. The chances are approximately 68 out of 100 that an estimate (a percent from the NFS) would differ from the actual population value by less than 1 standard error and approximately 95 out of 100 that the difference would be less than twice the standard error.

The contractor for the 1965 NFS produced tables of estimated standard errors, from which tables IV and V were derived. As noted in the text, bases of these percents are in table 3.

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NOTE: A list of references follows the text.

Table IV. Standard errors expressed in percentage points of estimated percents for currently married white women and women of all races combined: 1965 National Fertility Study

| Size of sample | Estimated percent | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 5 or 95 | 10 or 90 | 15 or 85 | 20 or 80 | 25 or 75 | 30 or 70 | 40 or 60 | 50 |
| | Standard error in percentage points | | | | | | | |
| 50 | 3.1 | 4.3 | 5.1 | 5.7 | 6.2 | 6.6 | 7.0 | 7.2 |
| 75 | 2.6 | 3.5 | 4.2 | 4.7 | 5.1 | 5.4 | 5.8 | 5.9 |
| 100 | 2.2 | 3.1 | 3.7 | 4.1 | 4.4 | 4.7 | 5.0 | 5.1 |
| 150 | 1.8 | 2.5 | 3.0 | 3.4 | 3.7 | 3.9 | 4.2 | 4.2 |
| 200 | 1.6 | 2.2 | 2.6 | 3.0 | 3.2 | 3.4 | 3.6 | 3.7 |
| 250 | 1.5 | 2.0 | 2.4 | 2.7 | 2.0 | 3.1 | 3.3 | 3.3 |
| 300 | 1.3 | 1.9 | 2.2 | 2.5 | 2.7 | 2.8 | 3.0 | 3.1 |
| 400 | 1.2 | 1.6 | 1.9 | 2.2 | 2.4 | 2.5 | 2.7 | 2.7 |
| 500 | 1.1 | 1.5 | 1.8 | 2.0 | 2.2 | 2.3 | 2.4 | 2.5 |
| 600 | 1.0 | 1.4 | 1.7 | 1.9 | 2.0 | 2.1 | 2.3 | 2.3 |
| 800 | 0.9 | 1.3 | 1.5 | 1.6 | 1.8 | 1.9 | 2.0 | 2.1 |
| 1,000 | 0.8 | 1.1 | 1.4 | 1.5 | 1.7 | 1.8 | 1.9 | 1.9 |
| 1,500 | 0.7 | 1.0 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 1.7 |
| 2,000 | 0.7 | 0.9 | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.5 |
| 2,500 | 0.6 | 0.9 | 1.0 | 1.2 | 1.2 | 1.3 | 1.4 | 1.4 |
| 3,000 | 0.6 | 0.8 | 1.0 | 1.1 | 1.2 | 1.3 | 1.3 | 1.4 |
| 3,500 | 0.6 | 0.8 | 0.9 | 1.1 | 1.1 | 1.2 | 1.3 | 1.3 |
| 3,841 | 0.6 | 0.8 | 0.9 | 1.0 | 1.1 | 1.2 | 1.3 | 1.3 |

Table V. Standard errors expressed in percentage points of estimated percents for currently married black women: 1965 National Fertility Study

| Size of sample | Estimated percent | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 5 or 95 | 10 or 90 | 15 or 85 | 20 or 80 | 25 or 75 | 30 or 70 | 40 or 60 | 50 |
| | Standard error in percentage points | | | | | | | |
| 50 | 3.2 | 4.3 | 5.2 | 5.8 | 6.3 | 6.6 | 7.1 | 7.2 |
| 75 | 2.6 | 3.6 | 4.3 | 4.8 | 5.2 | 5.5 | 5.9 | 6.0 |
| 100 | 2.3 | 3.1 | 3.7 | 4.2 | 4.5 | 4.8 | 5.1 | 5.2 |
| 150 | 1.9 | 2.6 | 3.1 | 3.5 | 3.8 | 4.0 | 4.3 | 4.4 |
| 200 | 1.7 | 2.3 | 2.8 | 3.1 | 3.4 | 3.6 | 3.8 | 3.9 |
| 250 | 1.5 | 2.1 | 2.5 | 2.8 | 3.1 | 3.2 | 3.5 | 3.5 |
| 300 | 1.4 | 2.0 | 2.3 | 2.6 | 2.8 | 3.0 | 3.2 | 3.3 |
| 400 | 1.3 | 1.8 | 2.1 | 2.4 | 2.6 | 2.7 | 2.9 | 3.0 |
| 500 | 1.2 | 1.6 | 2.0 | 2.2 | 2.4 | 2.5 | 2.7 | 2.7 |
| 600 | 1.1 | 1.6 | 1.9 | 2.0 | 2.3 | 2.4 | 2.5 | 2.6 |
| 800 | 1.0 | 1.4 | 1.7 | 1.9 | 2.0 | 2.2 | 2.3 | 2.3 |
| 1,000 | 1.0 | 1.3 | 1.6 | 1.8 | 1.9 | 2.1 | 2.2 | 2.2 |

# Appendix II. Definitions of terms in the National Survey of Family Growth

### Contraceptive status

As noted in the text, data on contraceptive status in 1976 in this report differ slightly from that in *Advance Data* No. 36.[22] In this report, the 1976 data are revised in two ways: the amount of missing data on contraceptive status and method used was reduced from 68 cases among currently married women to 3 cases by further analysis of cases with missing data, and priority was given to the woman's sterilization operation when husband and wife had been surgically sterilized.

*Pregnant.* A woman was classified as pregnant if she replied affirmatively to the question "Are you pregnant now?" or, for those in doubt, "Do you think you probably are pregnant or not?" A woman who reported that the onset of her last menstrual period was within the 30 days before the interview was automatically considered not pregnant.

*Post partum.*—A woman was classified as post partum if she reported she was not currently using a method, was not seeking a pregnancy, and her last pregnancy had terminated within 2 months before the date she was interviewed.

*Seeking pregnancy.*—A woman was classifed as seeking pregnancy if she reported she was not using a method at the time of interview because she wanted to become pregnant.

*Other nonusers.*—Women who reported that they were currently using no contraceptive method and were not sterile, pregnant, post partum, or seeking pregnancy were classified as other nonusers. Among these are women who were indifferent to the chances of pregnancy, had a very low risk of pregnancy due to some fecundity impairment, or objected to contraceptive methods for personal or religious reasons. Women who douched after intercourse but did not report this as a method of contraception also were classified as nonusers, although such douching practice is known to have a very modest contraceptive effect when done very soon after intercourse.

*Sterile.*—A woman was classified as sterile if she reported that it was impossible for her and her husband to have a baby. Sterile couples were classified further by whether the intent of the sterility was contraceptive or noncontraceptive (see "Surgically sterile").

*Nonsurgically sterile.*—A woman was classified as nonsurgically sterile if she reported that it was impossible for her to have a baby for any reason other than a sterilizing operation. Reported nonsurgical reasons for sterility included menopause and sterility due to accident, illness, or congenital causes.

In 1976, women who had been trying to conceive for at least 3 years without a pregnancy also were classified as sterile, probably accounting for most or all of the increase in nonsurgical sterility between 1973 and 1976. In any case, this increase was not statistically significant.

All couples who were sterile for nonsurgical reasons were classified as noncontraceptively sterile in tables 4, 5, and 6.

*Surgically sterile.*—A woman was classified as surgically sterile if she or her husband were completely sterile due to an operation. Because sterilizing operations frequently are obtained exclusively or partly as methods of contraception because of their complete effectiveness against conception rather than for therapeutic reasons, they have further been classified as contraceptive and noncontraceptive. In Cycle I and in the 1965 NFS, a sterilizing operation was contraceptive if the respondent answered "yes" to the question "Was the operation done at least partly so that you would not have any more children?" The question was reworded in Cycle II to "Was one reason for the operation because you had all the children you wanted?"

The percents of women contraceptively and noncontraceptively sterile are not fully comparable between 1973 and 1976, probably for four reasons.

NOTE: A list of references follows the text.

First, the rewording of the question cited above probably reduced the percent of sterilizing operations classified as contraceptive, because an operation that was done to prevent a pregnancy that would be dangerous to the woman's health usually would have been reported as contraceptive in 1965 and 1973, but as noncontraceptive in 1976. Second, in 1976, some respondent women may have reported their feelings about having had "all the children you wanted"; sometimes, the woman's preference may have differed from that of the couple jointly or that of her husband. Third, in Cycle I, if a couple had had more than one sterilizing operation—for example, a vasectomy followed a few years later by a hysterectomy—the interviewer coded the *earliest* operation. In Cycle II, however, the *woman's* operation was given priority. Because the first operation usually was contraceptive and performed on the husband, and because the woman's operation usually was noncontraceptive, couples with more than one sterilization operation tended to be classified as contraceptively sterile in 1973 and as noncontraceptively sterile in 1976. This change was made to obtain a complete count of sterilizations for ever married women; because the survey does not interview men, a complete count of sterilizations among ever married men cannot be obtained from it. Fourth, it may be speculated that some respondents in 1976 reported the reasons (health-related or noncontraceptive) they *switched* from a nonsurgical method of contraception such as the pill or IUD, rather than the reason they used contraception initially. All four of these factors tended to increase the fraction of sterilization operations classified as noncontraceptive in 1976, compared with 1973.

This problem has been discussed elsewhere by Pratt et al.[26] Despite this problem of comparability, however, eliminating contraceptive sterilization from the list of contraceptive methods (tables 7-14) would provide an incomplete picture of trends in contraceptive practice from 1965 to 1976 because of the very large increases in contraceptive sterilization in 1965-73 and 1973-76.

*Contraceptors.*—A woman who reported use of a contraceptive method other than surgical sterilization at the date of interview was classified according to the specific method used. Methods used by extremely small proportions of the population such as jelly, cream suppositories, or abstinence, not in combination with any other methods, were grouped in the category "other." When more than one method was reported in current use, the method generally considered the most effective was used for classification purposes.

NOTE: A list of references follows the text.

**Demographic terms**

*Age.*—Age is classified by the age of the respondent at her last birthday before the date of the interview. "Teenager" refers to a woman 15-19 years of age at the date of interview.

*Race.*—Classification by race, based on interviewer observation, was reported as black, white, or other. The number of sample cases of other women was too small for reliable analysis. They were, therefore, not shown separately in tables 4-14. Race refers to the race of the woman interviewed.

*Parity.*—Parity refers to the number of live births the respondent had.

*Years since wife's first marriage.*—This refers to the number of years between the wife's first marriage and the interview date.

*Marital status.*—This report is based only upon currently married women. Couples temporarily separated for reasons other than marital discord, such as vacation, illness, or Armed Forces, are classified as married.

*Household population.*—The household population consists of persons living in households. A household is a person or a group of persons, providing no more than five are unrelated to the head of the household, who occupy a room or group of rooms intended as separate living quarters; that is, the occupants do not live and eat with any other persons in the structure, and there is either (1) direct access from outside the building or through a common hall, or (2) complete kitchen facilities for the exclusive use of the occupants of the household.

*Religion.*—Women were classified by religion in response to the question, "Are you Protestant, Roman Catholic, Jewish, or something else?" In addition to the three major religious groups, two other categories—other and none—were used. Because Protestant includes numerous individual denominations, these respondents were asked to identify the denomination to which they belonged. Those who answered "other" to the original question and then named a Protestant denomination were included in their own groups. Although specific denominational names were obtained and recorded, the numbers of cases for most denominations were too few to produce reliable estimates, so they were combined in larger categories. In this report, only Protestant women and Catholic women were shown separately because the number of sampled Jewish women, women with other religions, and those with no religion were too small for reliable analysis.

*Education.*—Education is classified according to the highest grade or year of regular school or college that was completed. Determination of the highest year of regular school or college completed by the respondent is based on responses to a series of questions concerning (1) the last grade or year of school attended, (2) whether that grade was completed, (3)

whether any other schooling of a vocational or generally nonacademic type was obtained, and (4) whether other schooling was included in the years of regular school or college reported in (1).

The term "high school" indicates that the woman completed high school; the term "less than high school" indicates that the woman did not complete high school; the term "more than high school" indicates that the woman completed at least one year of college.

*Intent to have more children.*—Currently married fecund women were asked, "Do you and your husband intend to have a(nother) baby?" If the woman was pregnant at the date of the interview, she was asked, "Do you and your husband intend to have another baby after this one is born?" Women who answered affirmatively were classified as intending to have a child or another child; women who answered negatively were classified as *not* intending to have a child or another child. If the respondent (1) said she and her husband disagreed, or (2) said she did not know whether she intended to have a baby or another baby, or (3) the response was not ascertained by the interviewer, the woman was excluded from the tabulations by "parity and intent." Approximately 10 percent of wives in 1976 were excluded from these tabulations for these reasons. Similar procedures were followed for the 1965 and 1973 data.

# Appendix III. Selected sections of the currently married women questionnaire of the National Survey of Family Growth

## OPEN INTERVAL

CONTINUE DECK C 6

**Box 23.** If Currently Pregnant, Go To C-43. Otherwise, Continue.

C-34. Since your (last) pregnancy, have there been periods of one month or more in which you were not having intercourse, such as after your pregnancy ended , when one of you was away or sick, or for any other reason?

Yes . . . . . 1 (C-35) 29
No. . . . . 2 (C-36)

C-35. What months and years were those?
PROBE: What other months?

| FROM | TO | 30 31 32 33 34 35 36 37 |
|---|---|---|
| MO./YR. | MO./YR. | 38 39 40 41 42 43 44 45 |
| MO./YR. | MO./YR. | 46 47 48 49 50 51 52 53 |
| MO./YR. | MO./YR. | |

C-36. Please look again at the card. Since ( your [last] pregnancy/January, 1973 ), have you ever used any method for one month or more to delay or prevent a pregnancy?

HAND CARD 1

Yes . . . . . 1 (C-37) 54
No. . . . . 2 (C-43)

BEGIN DECK 07

| C-37. Starting with the earliest method you used during this period, please tell me all the methods you used for one month or more in the order you used them. PROBE: What other methods? (ENTER IN ORDER IN ANSWER AREA) | 1st METHOD 55 56 | 2nd METHOD 60 61 | 3rd METHOD 13 14 | LAST METHOD 26 27 |
|---|---|---|---|---|
| (Ask C-38 Through C-42 Sequentially For Each Method.) | | | | |
| C-38. In what month and year did you start to use *(METHOD)*? | MO./YR. 57 58 59 60 | MO./YR. 70 71 72 73 | MO./YR. 15 16 17 18 | MO./YR. 28 29 30 31 |

**Box 24.** If the Method Is Sterilization ('J' or 'K' Above) Go To BOX 26. Otherwise, Continue.

| | | | | |
|---|---|---|---|---|
| C-39. While you were using *(METHOD)* during this time, were there times when you skipped using any method at all? | 61 | 74 | 19 | 32 |
| Yes. . . . . | 1 (C-40) | 1 (C-40) | 1 (C-40) | 1 (C-40) |
| No . . . . . | 2 (Box 25) | 2 (Box 25) | 2 (Box 25) | 2 (Box 25) |
| C-40. Would you say you skipped using all methods often, sometimes, or only once or twice? | | | | |
| Often. . . . | 1 | 1 | 1 | 1 |
| Sometimes. . | 2 62 | 2 75 | 2 20 | 2 33 |
| Once/Twice . | 3 | 3 | 3 | 3 |

**Box 25.** If Last Method, Ask C-41. Otherwise, C-42.

| | | | | |
|---|---|---|---|---|
| C-41. Are you and your husband still using *(METHOD)*? | 63 | 76 | 21 | 34 |
| Yes. . . . . | 1 (C-43) | 1 (C-43) | 1 (C-43) | 1 (C-43) |
| No . . . . . | 2 (C-42) | 2 (C-42) | 2 (C-42) | 2 (C-42) |
| C-42. In what month and year did you stop using *(METHOD)*? | MO./YR. 64 65 66 67 | MO./YR. 77 78 79 80 | MO./YR. 22 23 24 25 | MO./YR. 35 36 37 38 |

**Box 26.** Go To Next Method (C-38), If Any. Otherwise, Go To C-43.

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## SECTION D

BEGIN DECK 15

**We are talking with women about children they may have in the future, as well as about those they already have. (IF "R" HAS ALREADY MENTIONED STERILITY, MENOPAUSE, ETC.: I think we have already covered some of these next questions, but I'd better go through them with you to be sure that I record the answers correctly.)**

**D-1.** It is physically impossible for some couples to have children. As far as you know, is it possible or impossible for you and your husband to conceive a(nother) baby, that is, to get pregnant (again)?

Possible. . . . . 1 *(D-6)*
Impossible. . . . . 2 *(D-2)* 14
Don't Know, Not Sure. . . . . 8 *(D-6)*

**D-2.** What is the reason that you are unable to have a(nother) baby? (RECORD VERBATIM ON LINES AT LEFT, CODE ALL THAT APPLY, THEN FOLLOW SKIP INSTRUCTION FOR SMALLEST CODE NUMBER. IF RESPONSE INDICATES A PROBLEM OTHER THAN STERILITY, CHANGE D-1 TO "POSSIBLE" AND GO TO D-6.)

15 16 17

"R" has had sterilizing operation. . . . . .01 *(D-3)*
Impossible for "R" due to accident or illness . . .02 *(D-3)*
"R" sterile for other reasons. . . . . .03 *(D-3)*
"R" has reached menopause . .04 *(D-14)*
Husband has had sterilizing operation. . . .05 *(D-3)*
Impossible for husband due to accident or illness .06 *(D-3)*
Husband sterile for other reasons. . . . . .07 *(D-3)*
Couple unable to conceive, don't know reason. . . . .08 *(Probe)*

PROBE: How many years altogether have you gone without using any birth control method and still not become pregnant? (RECORD VERBATIM ON LINES AT LEFT AND ENTER NUMBER OF YEARS.)

NO. OF YRS. *(Box 27A)* 18 19

**Box 27A.** IF 3 YEARS OR LESS, SAY: I know that you've talked about the reasons that you haven't become pregnant but could you tell me a little bit more your difficulty in getting pregnant?

THEN CODE "YES" IN D-6 AND RECORD RESPONSE IN D-7.

IF MORE THAN 3 YEARS, CODE 6 IN D-3 AND CONTINUE.

| D-3. | D-4. | D-5. |
|---|---|---|
| (ASK QUESTION ONLY IF D-2 IS FEMALE OPERATION; OTHERWISE, CODE WITHOUT ASKING.) What kind of operation was it? | CHOOSE APPROPRIATE QUESTION: (A) When was the operation done? (B) When did (you/your husband) become sterile? (If D.K., PROBE: . . . learn of the sterility) | Was one reason for the operation because you had all the children you wanted? |
| One ovary removed ("R" not sterile) . . . ○ | → CHECK THE APPROPRIATE CIRCLE IN D-3 AND PROBE TO FIND OUT IF SHE IS SURE THAT SHE IS STERILE. If she is sure, circle Code "6 - other reasons" in D-3 and follow the appropriate skip instruction for that category. If she is not sure, record her answer verbatim and skip to D-8. | |
| One tube tied or removed ("R" not sterile) . . . ○ | | |
| Both ovaries removed. . . . . 1 *(D-4A)* | MONTH / YEAR *(D-5)* | Yes . . . 1 *(D-7B)* No. . . . 2 *(D-14)* |
| Both tubes tied or removed . . . . 2 *(D-4A)* | MONTH / YEAR *(D-5)* | Yes . . . 1 *(D-7B)* No. . . . 2 *(D-14)* |
| Hysterectomy (Removal of uterus). . . . . 3 *(D-4A)* | MONTH / YEAR *(D-5)* | Yes . . . 1 *(D-7B)* No. . . . 2 *(D-14)* |
| Vasectomy (cutting male sperm ducts) . . . 4 *(D-4A)* | MONTH / YEAR *(D-5)* | Yes . . . 1 *(D-7B)* No. . . . 2 *(D-14)* |
| Other operation or type unknown . . . 5 *(D-4A)* | MONTH / YEAR *(D-5)* | Yes . . . 1 *(D-7B)* No. . . . 2 *(D-14)* |
| Accident, illness or other reasons. . . 6 *(D-4B)* | MONTH / YEAR *(D-14)* | |

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